

THE TIMES

Higher Education

SUPPLEMENT

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Students may get £17,000 sit-in bill

from Tim Albert

LANCASTER
The students' union at Lancaster University, whose annual income is £60,000, may get a £17,000 bill for the 12-day sit-in last term.

The sum includes £1,717 for repairs to University House, £1,775 for expenses incurred by the 11th Sheriff and 25 bailiffs in evicting the students, £300 in counsel's fees and an estimated £3,000 to £4,000 solicitors' fees.

The sheriff's office has also asked the university for a fee of £7,824—calculated on the basis of 3 per cent of the annual rateable value of the property—and in this case the property has been interpreted as the whole university.

The university's lawyers say the figure should be based only on the property reclaimed (University House) and that the bill should be only £220. Mr Stephen Jefferys, university secretary, said he had no option but to recommend to council that, subject to legal approval, they should pass the bill on to the students' union. He added that it was possible they could come to some agreement about pay over a period of time.

The 28 students disciplined by a special committee of senate gave notice of their appeal this week. Their letters to the secretary for students' affairs say they are appealing against the tribunal, its procedure, its decisions, and its penalties. They say new evidence has come to light.

The appeal will be heard, at a date as yet unspecified, by the university's committee of appeals and equity. It will have a chairman (not necessarily a member of the university), a senior member, and a junior member, all three appointed by the senate in consultation with the student representative council. The students say they will be legally represented.

A meeting of about 30 members of the Association of Scientific, Technical and Managerial Staffs academic group passed a motion saying it believed the "judgment" was morally and constitutionally indefensible and deplored the "tribunal", the use of suspensions before the cases had been heard, and the severity of the penalties.

Both vice-chancellor and student leaders seemed deadlocked, refusing to alter their positions over the three basic issues: the rent strike, the disciplinary proceedings and the occupation. On Wednesday senate was due to meet to discuss a proposal from the vice-chancellor and pro vice-chancellors that the student representative council should abolish its own executive and general meeting, and from Professor A. H. Woolrych to clamp down on the use of loud-speakers on the campus.

On the same day the NUS was organising its day of action in Lancaster, and the Lancaster students' union was due to discuss whether or not to hold another occupation.

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Yale gives guide on free speech

Detailed guidelines to ensure freedom of expression at Yale have been drawn up by a committee established after Professor William Shockley, the controversial Stanford physicist, had been prevented by students from speaking on the campus last year.

Details, page 12

UGC hints at cuts in grants to slow growth universities

A strong hint that the University Grants Committee may be forced to cut its grants to universities with slow rates of growth was given this week in a letter from Sir Frederick Nisbitt, the chairman.

The letter told each university its grant for the academic year 1975/76.

Sir Frederick said the UGC would hope to rectify any disparity arising from different rates of growth in the future. It would do its utmost to ensure that the "total resources" available to universities were adequate for their "future tasks".

It ended: "Looking, as one is bound to do at present, at a situation where resources are extremely short, such rectification could, I am afraid, imply reduction of commitments and/or some further pressure on the level of grant. It is possible to make to those universities which have the slowest rate of expansion."

The letter says that if the rate of inflation moderates slightly, every university should have a minimal increase in resources next year. Unless the rate of inflation is very much less, however, student costs will be reduced in universities that are expanding.

Inquiries by *The Times* this week suggested that the universities can expect no relief from financial hardship in 1975-76. No relaxation of the stringent economies instituted in the past two years is contemplated. Academic and non-academic posts will stay frozen and maintenance and repair work will remain undone unless absolutely imperative.

Leeds University, faced with a deficit this year in excess of £500,000 were least pessimistic. A spokesman said that in the circumstances it was satisfied with its allocation which would enable it significantly to reduce its deficit and improve morale.

Most universities accepted their allocations with resignation, although all agreed that the sums

were inadequate. One view was that the UGC had been especially fair to those which had slow or no growth policies.

The settlement was said to be "trimming, but not disastrous", but a disincentive to expansion. The largest allocation, £37.16m, goes inevitably to London University—its size and number of colleges coupled with the London weighting in salaries mean that it has financial problems on a different scale to the rest of the country. Of universities canvassed this week, Manchester University had the next largest share (£17.9m) followed by Oxford (£16.2m) and Leeds (£15.7m).

Bath University, which received only £4.1m argued that it should have been compensated for reaching its student enrolment target. "If we are to avoid a stable deficit in the coming year, Bath will have to consider drastic measures such as early retirement", a spokesman commented.

Mr Edward Dabill, deputy bursar at York University, said its £3.8m award "Should keep us going as we are, although we may be able to restore one or two of the posts frozen last year". Mr A. M. Currie of Sheffield University said of his university's £11.9m award: "It is what we expected. It is going to keep us in considerable difficulty."

Mr Ted Bell of Reading University said: "The whole business makes nonsense of quinquennial planning. What we are doing is living from year to year, making decisions at the latest possible stage."

Sussex University, which was able to make up for inflation in 1974-75 by using reserve funds, will have to introduce cutbacks in its operation now that its reserves have been used up. The UGC has awarded £6.1m—not enough to maintain the status quo, according to Mr Ray Howard, Sussex's Finance Officer.

Among the points made in Sir Frederick's letter were: "In relation to expenditure other than on sal-

How the grant was divided

University Recurrent Grants 1975/76

Aberdeen	9,425,000
Aston	7,352,000
Bath	4,097,000
Birmingham	15,906,000
Bradford	7,368,000
Brunel	4,814,000
Cambridge	16,227,000
Dundee	6,750,000
Exeter	5,252,000
Lancaster	5,018,000
Leeds	15,711,000
Liverpool	14,140,000
London	37,164,000
Manchester	17,921,000
Oxford	16,707,000
Sheffield	11,921,000
Striling	3,130,000
Strathclyde	8,750,000
Sussex	6,101,000
Wales	26,407,000
York	1,775,000

aries of academic and related staff, the grants are at a notional price level in January 1976 and no further grant in respect of inflation of these costs during the year is to be expected. The grants embody provision for academic and related staff salaries at the 1974 level plus authorized threshold payments.

The grant is not of the estimated additional revenue arising from the increase of £70 in tuition fees on the assumption that this applies to all full-time students. However, the committee have kept a special reserve and will accept claims for supplementary grants towards the cost of meeting waivers of the increase in cases of hardship.

"We shall be in touch with your Finance Officer separately about the maximum sum within which claims will be accepted and the machinery for making them."

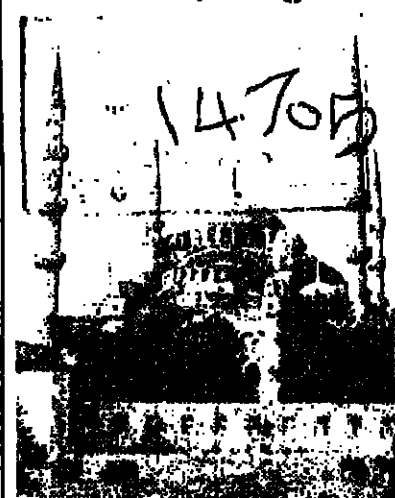
Any unmarked grants for 1975/1976, including those for social work training courses, are included in the total grant, and should be regarded as increased, to be consistent with the price basis now established. Universities will wish to review the indicated amount for vacation study and field course expenses in the light of current costs. The separate payments for the cost of pensions increases for retired members of academic and related staff are not included in the grant.

The committee greatly regret that it has not yet been possible to

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'Britain must pave way for student influx from oil-producing countries'

by Frances Gibb

Britain must prepare itself to face strong pressures from the oil-producing countries to increase the number of their students studying in Britain, Sir John Llewellyn, director general of the British Council, told a conference on overseas students in London last week.

"We are now entering quite a new stage in relationships with overseas students. They come at a time when we have greater internal problems, in a financial sense, than we have known for a long time. We are being looked on by parts of the developing world as a kind of Mecca, towards which, now that they can afford it, they are turning," he said.

The increase would not be confined to universities and it was important that Britain organized to deal with the likely expansion.

Many of the overseas students from the oil countries would come to Britain under a paid educational services scheme, under which large numbers of students will be trained.

Sir John told the conference that the Government was considering setting up a high level committee to examine these services in conjunction with the building and equipment industries, which could assist the oil countries with advice on equipment and the design and construction of buildings.

The conference, attended by about 200 delegates from educational and welfare institutions dealing with overseas students, examined accommodation, language, testing, entrance requirements and cultural orientation.

It was in Britain's interest to respond to the expansion, Sir John said. Apart from the social advantage of bringing young intelligent people into the country, the oil countries from which they came would need huge quantities of buildings and books which could help Britain's economy.

Overseas students now formed one-sixth of all undergraduates in Britain, and a higher proportion of postgraduates. Citing Iran, he said,

their government at present spent about £10m on education here and was prepared to increase this to £50m.

Housing was, however, still a major problem and difficulties due to the expected increase in numbers is to form part of the council's submission to the government committee on paid educational services. Mr Peter Martin, deputy controller in the education and science division, told the conference.

Mr Dick Lefanu, deputy director of the council's centre in London, said although the housing problem reflected the general housing situation overseas students did have particular problems.

"It is harder for them to rough it in sub-standard accommodation, to live communally as many British students are obliged to do. Not all landlords want overseas students, and although the great number of students are admirable, the few bad ones are remembered in a way that British students would not be."

The problem was worse for polytechnics than for universities. Polytechnic halls of residence were obliged to charge economic rents for overseas students and this was beyond the means of all but a fairly small proportion, he said.

Mr Simon Mondie, a lecturer at South Bank Polytechnic, said university residences were in the position of one room to every 2.4 students, against polytechnic's residences one room per 12.6 students. Yet, most overseas students were coming to polytechnics for undergraduate courses, and to universities for postgraduate courses.

Ideally, institutions should only offer places for students for whom they could provide accommodation, but it was not always possible to estimate accurately about the amount of private housing available, Mr Lefanu said.

It was suggested by one delegate that the Council for National Academic Awards should only certify polytechnic courses where sufficient housing could be provided.

Sir Dermot Milman, a council officer from the Overseas Students

Welfare Expansion Programme, said that OSWEP funds were almost exhausted. Out of the original £5,250,000 only £700,000 was left. But the scheme could still support universities to provide residences for overseas students by £1,000 per place. This might cover the cost of conversion, if not the actual building, he said.

For polytechnics, the situation was more difficult, because they were totally government-financed and there could be no voluntary contribution. This could be worked round, however, he said. If polytechnics or colleges provided some funds from non-governmental sources, OSWEP could assist them with a grant.

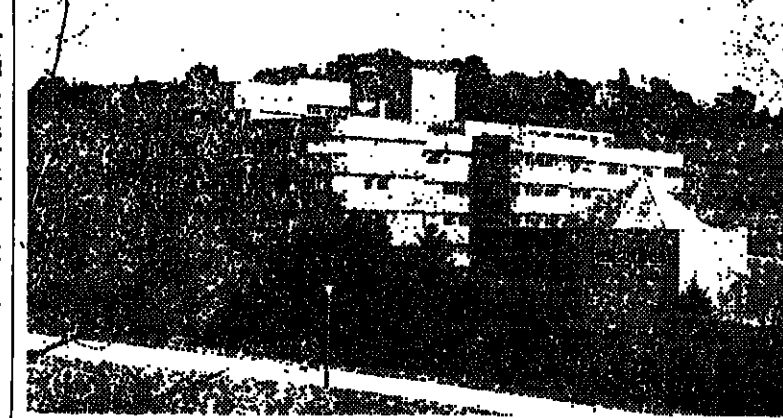
Universities and polytechnics should share cave histories on the difficulties of estimating a student's qualifications. Miss Mary Wane, a research and liaison officer in the council's higher education department, suggested.

Her department had already set up the British Centre of a European network, which aimed to assist other centres in assessing British qualifications. In turn Britain was helped by other centres. The main worry for overseas students was whether or not their qualification would be accepted by a British institution, she said.

Filling in the Universities Central Council on Admissions form is itself a problem for overseas students, she said. Her department was considering a proposal to UCCA that forms should carry a supplement form for overseas students which would be more relevant to their experience.

Evolution of British qualification in the students' home countries was a third problem. "Often students go back to a more inflexible system with hidebound rules and have difficulty persuading their home institutions that what they have done is worthwhile."

She urged delegates to think more carefully about the certificates they gave and how they could best be presented to the students' advantage.



This £900,000 social studies building at Exeter University was opened recently by Lord Amory, the university's chancellor. The building, named after Lord Amory, is the largest on the campus, and will accommodate some 1,400 students from the departments of law, economics and statistics, economic history, sociology, politics and geography.

Fixed hours could damage polytechnics, CDP warns

by David Walker

Fixed hours and conditions for further education teachers could damage the polytechnics, the Committee of Directors of Polytechnics said this week.

The CDP was commenting on the conditions of service document agreed recently by the Council of Local Education Authorities and the "recognized" teachers' organizations.

The statement, which emphasized the professional approach by polytechnic teachers, criticized the attitude of the Association of Teachers in Technical Institutions, the main further education teachers' association.

The ATT negotiated for several years with the CLEA and its predecessor for fixed minimum hours.

The CDP complained that it was not formally involved in these negotiations. Polytechnic directors were represented as employees through the Association of Principals of Technical Institutions, but the CDP was not involved as a management body.

The statement by the CDP made a number of points given promi-

nence by the Association of Polytechnic Teachers, the "breakaway" association of polytechnic lecturers. The statement said it was very hard to see how appropriate conditions of service, consistent with the trends in educational development, and with the real needs of institutions, could be evolved without the direct involvement of the managers of the institutions concerned.

Strictly defined conditions of service went against the spirit of the Houghton report on teachers' pay. The Houghton recommendations recognized that the polytechnic teacher's job could not be compressed within a rigid structure of prescribed duties and hours.

"Our objections to these conditions of service are quite fundamental. We feel that our society is very much in need of a shift towards commitment, duty and service, and away from definition of maximum expected effort, and we would like to think that our sector of education could give a lead in that shift."

The APT was present recently at a meeting between the CDP and representatives of colleges of higher education.

'Local government discontent will follow Houghton'

The spin-off from the Houghton report will be immense, the Rev. Dr George Tolley, principal of Sheffield Polytechnic, predicts in the latest issue of *Universities Quarterly*.

"Not only will local government officers feel threatened as they see senior members of the teaching staff out-distance them in earnings and prospects, but what of administrators and technicians in the larger public sector institutions?" he asks. "One glance at the differences in salaries of senior administrators and senior technicians in universities and in polytechnics is sufficient to indicate what struggles are ahead."

In an article which commends the Houghton committee for bringing a note of sanity and justice to higher education, he criticizes it for introducing an efficiency bar and failing to explain why it has recommended lower proportions of senior staff than those which are possible within universities.

He also argues that the Houghton report has appeared at a very difficult time, both because local authorities are tightening purse strings and because of the problems which will arise from college of education mergers.

Promotion prospects within polytechnics may be extinguished by the need to redeploy college of education staff as teacher training numbers run down, he says.

Labour studies

A part-time evening course in labour studies and industrial relations will start in September at the school of social sciences and business studies, Polytechnic of Central London. The course, which will last for two years, is intended primarily for practising trade unionists.

Nuttgens to apply for new Leeds rectorship

Leeds City Council has decided to advertise the post of director of the new institution that will take over the polytechnic, and the city's two colleges of education next year.

The authority is believed to be the first in the country to advertise a top post for a new institution following the merger of colleges and a polytechnic. Dr Patrick Nuttgens, director of Leeds Polytechnic, confirmed this week that he will be applying for the job.

The new institution will be known as the New Leeds Polytechnic Institute of Higher Education and will combine the polytechnic, the City of Leeds and Carnegie College and James Graham College. The new director of the institution will be known as the rector.

The city's decision to advertise the post followed pressure from the colleges of education but it is not warmly supported by the polytechnic staff.

The polytechnic has, however, succeeded in persuading the authority to keep the word polytechnic in the new institution. The authority previously proposed to call it the Leeds Institute of Higher Education.

Surrey CAFD formed

A new branch of the Council for Academic Freedom and Democracy covering all institutions of tertiary education in the Guildford area of Surrey has been formed after the local teachers' representatives from West Surrey Colleges of Art and Design, Guildford College of

Lack of well qualified candidates brings setback for admission of women to Cambridge

by Frances Gibb

No more Cambridge colleges should admit women students before 1980 because of a lack of well-qualified candidates, a consultative committee, set up to arrange the time-tabling of admission of women, has advised.

In a recent letter to the heads of colleges the committee reports that admission of women to the first three mixed colleges (Clare, Churchill and King's) has not produced the expected increase in applicants, but merely redistributed them from the women's colleges.

The adverse effects of this redistribution have so far been limited because there was a large pool of well-qualified candidates. But this pool has now been eliminated.

Figures in the past two years showed that the number of well-qualified applicants was less than the planned number of places for women in 1976-78. Planned admissions are: Solwyn, 25-35 in 1976; Sidney Sussex, 25 in 1976; Trinity Hall, 30-35 in 1977; and Trinity, 30-70 in 1978. This would give a minimum of 110 places more than the 500 now offered. In addition, the new Robinson College will also be mixed.

The number of candidates not offered a place for 1975 had highly recommended to the general pool was 82. Another 108 were recommended.

Cambridge also has to take account of the

competition from the mixed colleges at Oxford, which now offer about 600 places to women, the committee says.

It advises colleges to defer decisions on admission dates until 1978, when a survey of the impact on number, quality and subject distribution of the mixed colleges will be undertaken.

Further problems on the admission of women are outlined in the second report of the subcommittee on the admission of women, published last week. It warns colleges that admitting more women will necessitate an increase rather than a switch in arts teaching because the arts/science ratio will be altered.

"If nine more colleges were to admit women after 1976, determined to build up their number to about 30 per cent of their undergraduate membership, they must reckon on an increase of about 19 in their annual entry on the arts side of the college and about three or four on the science side."

Colleges are urged to consider collective responsibility in increasing teaching posts, especially in arts subjects, in which more teachers were needed for supervision than for lecturing and examining.

"The potential strain on the resources of the poorer colleges will be considerable and the women's colleges may have difficulty in sustaining their present balance of subjects. The percentage of women undergraduates at Cambridge to the national average of 36 per cent by 1981, nine more mixed colleges (or Trinity and seven others) would be needed."

If the advice of the consultative committee is followed, however, the percentage by 1981 is more likely to be about 30 per cent. "If the flow of women applicants will sustain six to nine more mixed colleges, the percentage of women clearly could reach about 30 per cent by 1981."

Colleges admitting women are urged to try to equalize the arts/science ratio at postgraduate level by encouraging growth in the number of graduates in the natural sciences, mathematics and engineering.

They should cooperate with schools "to seek out able girls who may be encouraged to apply for admission to read these subjects."

The percentage of women postgraduates could soon reach the national average of 23 per cent if the upward trend in research applications continues. At present, 16.9 per cent of Cambridge postgraduates are women.

The increase will alter the science/arts ratio by causing a fall in the proportion of science postgraduates from 23.9 per cent to almost the national average of 21.1 per cent. This conflicts with the university's long-term development policy of maintaining as high a proportion of science postgraduates as possible. Numbers in the arts faculties will increase by about two per cent more.

The balance among subjects will also alter. The present bigger proportion of women in the physical sciences, mathematics and engineering would shift to medicine and biological sciences, subjects at present favoured by two-thirds of Cambridge women postgraduates.

Colleges should not give particular consideration to the balance of sexes among postgraduates only, but rather in the college as a whole, the report says. They should not, however, attract large numbers of women postgraduates to offset a slow increase in women undergraduates.

"The increase in undergraduate women at Cambridge will produce no more than a dozen full-time lectureships at the most, the subcommittee reports."

New posts will be created by the mixed colleges but it is unlikely that all future vacancies in the mixed colleges will be filled by women.

Women are about one and a half times better represented on academic staff at other British universities than at Cambridge (6.8 per cent compared with 10 per cent), and this proportion at Cambridge has remained constant for the past 20 years.

One reason is the prominence of the physical sciences, mathematics and engineering at Cambridge, in which the number of women is generally below average. Another is the exceptionally high level of scientific competence required for appointment to posts, the report says.

Women are generally less well qualified in mathematics than men and "the remedy for this lies with the schools."

The colleges are urged to eliminate inequalities in the amount given in research fellowships, but it is not recommended that mixed colleges should necessarily seek to appoint women to fellowships.

Women in Ulster victims of outdated laws, report says

by Richard Cowper

Educationally, sexually, financially and legally the women of Northern Ireland are worse off than women in Britain, according to a report presented at a two-day conference on women in Belfast last weekend.

Discrimination against women at home and under the law is widespread in Northern Ireland and is on a much larger scale than in the rest of the United Kingdom, says the report, published by Queen's University Students' Union.

The conference, held at Queen's University, was attended by some 20 women from student unions, trade unions and political parties from Ulster, Eire and Britain.

The 19-page document titled *A Report on Legal, Social, and Economic Discrimination Against Women in Northern Ireland* lists a number of areas such as the age of consent, abortion, divorce and the woman's right to an interest in the family home where out-dated laws already abolished in Britain still apply in Ulster.

Apart from widespread legal discrimination, the report accuses the Government of pursuing a deliberately discriminatory policy

over the number of jobs open to women in government sponsored industries.

In education, it was found that while there appeared to be no deliberate discrimination in practice women tended to be limited by their traditional social role, ending up largely in institutes of education.

In the academic year 1971-72 there were over 4,000 male students at Queen's University whereas there were fewer than 2,000 female students. The report argues that "the work women do is often limited by their educational achievements" and that only half the average weekly wage of a man.

Abortion is well nigh impossible to get in Northern Ireland. The 1967 Abortion Act does not apply to Ulster, and doctors can only help in the most extreme cases where there is a genetic risk or where the woman is mentally subnormal.

Ulster's divorce laws have not been changed to come into line with the new law passed recently in Britain which makes it possible to get a divorce after two years on grounds of incompatibility and irretrievable breakdown, the report points out.

Extra-mural history pays more

A greater proportion of staff in the history department earned money from outside sources than staff in other departments, a survey of outside earnings at Lancaster University has revealed.

In history 92 per cent of the staff had outside earnings compared with 25 per cent in computer studies, where the proportion was lowest. Engineering and philosophy were also low on the list, whereas the systems, operational research and research departments had a high proportion of staff with outside earnings.

In the university as a whole, 69 per cent of the 306 members of teaching staff in the survey had some outside earnings during the year 1972-73. The average amount

The proportions increased markedly according to rank, with 98 per cent of professors, 89 per cent of readers and senior lecturers, but only 38 per cent of lecturers earning income from outside sources. The average amount was £2,870. The average earnings were highest in the business studies faculty, but the maximum amount was in the arts faculty where the top of the range for professors was £2,870. The science and technology faculty, which included mathematics and computer studies, had the lowest average

News in brief

CNAH Honorary degree awards

Honorary degrees will be conferred on six people by the Council for National Academic Awards at a ceremony in the Queen Elizabeth Hall on June 3.

The six honorary degree candidates are: Sir Derman Christopher, vice-chancellor and Warden of Durham University and a former chairman of the Committee of Vice-Chancellors and Principals; Sir William Goldstream, Slade Professor, department of fine art at the University College of London since 1949; Sir Alec Hargreaves, advanced design consultant with British Leyland (Austin-Morris) Ltd since 1972; Dame Kathleen Ollerenshaw, Lord Mayor, designate of Manchester; Jean Piaget, professor of child psychology at Geneva University since 1923; and George Rochester, professor of physics at the University of Durham.

Geography surveyed

London Geographical Contact, a new local group of postgraduate research students, called its first meeting during April.

A conference, at University College London, was held to discuss the local research environment and techniques and strategies of research in geography.

Part-time psychology

A new course at North East London Polytechnic will enable students to study in their spare time a BSc honours degree in psychology. The course involves three evening sessions per week over four years.

Putting news on MAP

A student newspaper, the *Manchester Student Paper* or MAP, will be published from May 14 in an attempt to unite students in universities, polytechnics and colleges in the Manchester area.

Anglo-French relations strengthened

Coombe Lodge, the further education staff college, strengthened its links with Europe recently when it held its first Anglo-French conference. The theme of the conference was the teaching of educational management and teachers from England and France attended.

Professor Boris Ford, director of the college and Further Professional Studies at the School of Education, Bristol University, opening the conference, raised a number of questions concerning the changing role of educational administrators and teachers.

He said teachers would become "organisers" of knowledge and "managers" of the means to acquire knowledge and their task would be infinitely more complex than before. In order to monitor self-directed learning, methods teachers would need a greater understanding of the process of child development, relations between home, school and the community, and the school as a social institution.

Professor Ford looked at the differences between the educational systems of England and France and examined the possibilities for change, and for "managing change".

In particular, Professor Ford questioned whether there are likely to be radical differences in the educational managers and in the methods of training and educating them. He noted the well-established establishment of professional training for the Civil Service in France and wondered whether French models would be drawn from this experience, in contrast to the likely English models drawn from industrial management experience.

In the second part of the conference there was an examination of the main problems of teaching education management in each country. Background papers were provided by A. Mundy, of Sheffield Polytechnic, staff from the universities of Rennes and Paris, from INAS and a secondary school in Lille.

Academics on maintained schools inquiry

Two academics have been appointed to a 20-member committee of inquiry of the House of Commons which will look into the management and government of maintained primary and secondary schools in England and Wales. Dr G. Harris, professor of educational administration at the University of London Institute of Education, and Mr F. D. Flower, principal of Kingsway-Princeton College, London.

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London University reform plan will increase bureaucracy says AUT

by Laura Kaufman

The 26,000-strong Association of University Teachers has severely criticised the University of London's proposals for constitutional reform.

The association, which represents more than 6,000 London University academic and related staff, says that the proposals will increase centralisation and bureaucracy against the wishes of the staff and the schools of the university.

The proposals are contained in the second report of the university's consultative committee for coordinating discussion on the recommendations of the Murray Report.

In a five-page submission to the consultative committee, the AUT welcomes the committee's recognition of the need for reform, especially in the areas of planning and participation, within the context of the federal university.

It also comments the second report's recognition that all planning at federal level should be done by the university, and that participation by staff, both senior and junior, and by students, should be

extended as widely as possible.

But, the AUT said, the second report fails to provide the reforms required.

Taken together with certain measures already put into operation, particularly the formation of a strong joint committee of the court and senate for planning and development (JCCS), the proposals can even be said to express a tendency toward the enhancement of centralisation and bureaucracy.

The AUT says the main threat contained in the Murray Report, and to which objection was so widely expressed by the staff and the schools, is the submission says.

The association adds that the university's various institutions have preferred to remain within a federal framework, and that in recent years their academic independence and autonomy have been increasing.

"For this reason we feel that it would be wrong to make any fundamental changes in the existing balance of powers within the federal system, and in the developments that are now occurring since any such changes would be premature."

It rejects convocation as a satisfactory source of lay members of the court, and instead calls for the election of lay members from the ranks of the university, and for the election of lay members from the ranks of the university, and for the election of lay members from the ranks of the university.

The association's most serious concern is about the proposal relating to the election of academic and staff representatives on to senate.

"This question is, to us, at the very heart of the reform of the university and the proposals from the consultative committee are ill conceived."

They would leave the university's staff very much in the minority on the main academic committee, which would oversee the work of the JCCS, the AUT says.

It also rejects the proposal that junior staff should be represented by cooption. Instead, it recommends an academic assembly consisting of staff elected directly from the schools.

This assembly should elect between 30 and 40 senators.

The AUT also welcomes the proposed increase in lay representation but says that this should be on a broader social basis.

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There were two types of bourgeois thinkers whose ideas on postgraduate education had to be resisted. The first were those who were now suggesting that postgraduate work should be strictly controlled, and considered in terms of the financial investment it represented.

These are the hard-headed men who think that much postgraduate work in the arts is a waste of money, and are keen to cut down on some of the more obscure areas of postgraduate work.

Professor Hilton said that the second type were those ivory-tower elitists whose approach was a hang-over from the time when higher education was a training for an intellectual elite, and who had continued to sneer at demands for socially relevant learning.

Professor Sam Edwards, chairman of the Science Research Council, told the conference that the dual support system, by which the research council and the University Grants Committee share responsibility

'Limit individual PhD research in favour of teamwork'

by David Dickson
Science Correspondent

Far more postgraduate research in the arts and social sciences should be carried out on the basis of collective, rather than individual projects, according to Professor Rodney Hilton, professor of history at the University of Birmingham.

He told a conference at Southampton University on postgraduate education, organised by the National Union of Students, that postgraduate education should concentrate on getting rid of the individual PhD, and develop the concept of teamwork, with full and democratic discussion of all aspects of the research.

"One advantage would be in the field of continuing education, since, as the Open University has shown, there is a vast reservoir of talent in the community and this could be much better integrated into team work rather than into the individual and isolated PhD", Professor Hilton said.

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bility for financing university research, was being placed under strain by the current economic difficulties.

The informal basis of the dual support system worked well when there was enough money to go round, but it might cease to exist if the economic situation got any worse, he said.

The research council faced a major task each year in working out how many science postgraduate students it should fund, and how they should be divided between different disciplines.

"At present, once an allocation has been made to one of the four SRC boards, it is up to each subject to bargain for the number of awards it required. I would prefer, however, not to have to decide on an overall number of awards, but to have a fixed number of awards, and to be much more flexible in our approach."

Although there was a lot of talk that the council should give more research studentships rather than research studentships, he said it was important to remember that assistantships were awarded for specific research projects, while research studentships allowed the student to change his research topic if he felt it necessary.

Mr Jon Clarke, a member of the NUS postgraduate advisory group and a postgraduate student at Birmingham University, said there seemed to be three basic categories of postgraduate education, covering the applied sciences, professional training and more theoretical work.

"I see the first of these becoming the most dominant of the sectors, with the second being affected by the cut-back in teacher training and the third experiencing similar cuts, apart from a small elite."

Mr John Randall, retiring president of the NUS, said that postgraduates should not see their problem in isolation, arguing that they were a special case, but should see their position as part of the whole education system under attack from Government cuts.

Students in Britain are not being properly educated about a recent Royal Society Health Conference was told last week.

Leeds University survey of health education in colleges and departments of education in England and Wales revealed "a high level of ignorance" about behaviour patterns and substances dangerous to health, said Dr J. Morrison, specialist in community medicine.

She said area health authorities gave health education low priority, even though it could cut costs. Doctors knew that certain factors which played a part in disease could be eliminated if people were aware of them.

One such disease was lung cancer, yet the Leeds survey had shown 60 per cent of colleges in England and Wales gave students no health education at all, and 40 per cent of colleges gave no information about road safety or home accidents.

No comparable figure was available from medical schools, nursing schools, or university sociology departments, but Dr Morrison said there was good reason to believe that the picture there was no better and could even be worse.

"If we accept the concept that a man's health depends on his ability to adjust his environment to his own needs, then we must accept that teachers and members of the caring professions have a clear duty to participate in health education."

"Naturally they should be adequately trained if this participation is to be effective," TES.

£5,000 from Penguin
Penguin Books have endowed Essex University with £5,000 for a series of lectures over two years.

Next year the Penguin lectures will be given by Mr Kenneth Keniston, the chairman of the Carnegie Corporation.

When, in connexion with a complex bit of administrative reorganization, you can't get hold of Professor A because he is in Nigeria, or Dr B because he has influenza, and some of the necessary steps have to be deferred, you don't lose sleep over something that can't be helped. Even routine meetings can be held by telephone, and when you've done your homework, when those around the table are genuinely trying to help the business along and reach some useful conclusions, where there's some humour en route and some sense comes through that people like being part of what is going on in the place. And an empty in-tray makes for restful slumber.

All this is sometimes in sharp contrast to the processes involved in research, and writing. A book can take two, three, five years. Months can be spent on drafting a section. It eventually goes into the waste paper basket. False trails abound. Some of the work can be planned and timetable. But the important thing is that those most useful in organizing the material into a coherent whole, do not come easily or in order. Leave the thing for a few days and it goes cold on you. Work on it in short bursts.

For myself, I find the only way to clear the daily pile of letters and memoranda and papers that can't pass on to someone else is to draft articles and longer pieces to tap them out on one of several typewriters located in places where I am likely to want them; that a

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Don's diary

No agenda

British Rail cooperating, got off to prompt start with regular weekly 9.30 am briefing meeting with administrative colleagues. No agenda. Everyone brings his own list. The only problem is getting through everything by coffee time.

Talk about Association of University Teachers' day of action, new structure of awards in the colleges of education, administrative regrading, search fees to be charged for digging out past examination marks, programme for University Grants Committee visit, procedure for establishing two new chairs, departmental conference accounts, timetable for occupying our new building and a lot else besides.

Spend half an hour in common room and save at least four memoranda and possibly a committee meeting as well. Thrash up and down the students union pool enough times to feel exhausted, virtuous and ready for lunch.

Spend afternoon at meeting out of town. On way back train fills up one stop out of London terminus with commuters who know the canopies are to form their own homebound service and who find that a short distance travelled in the wrong direction is the only way in which to get a seat.

Sharp contrasts
A line drawn through the day in the diary six months ago preserves it for library work and/or the performance of my fire brigade function. No fires, so to the library.

Academics often complain about the difficulty of trying to combine administration with scholarship and teaching, and how the full in-tray almost inevitably takes precedence over drafting the next chapter. But it isn't simply a matter of competing demands on the available time, or how much of the day has to be spent in meetings rather than in the library or at the desk.

The sequence and the logic of administration and my kind of research and writing are very different, as are the types of feedback that each provides. In darker moments I sometimes think that the two activities positively inhibit each other. Most administrative tasks can fairly readily be broken down into steps or stages, few of which take more than a few hours. On most issues a rough draft of a committee paper can be cobbled together in half a day.

When, in connexion with a complex bit of administrative reorganization, you can't get hold of Professor A because he is in Nigeria, or Dr B because he has influenza, and some of the necessary steps have to be deferred, you don't lose sleep over something that can't be helped. Even routine meetings can be held by telephone, and when you've done your homework, when those around the table are genuinely trying to help the business along and reach some useful conclusions, where there's some humour en route and some sense comes through that people like being part of what is going on in the place. And an empty in-tray makes for restful slumber.

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your warm-up time is insufficient to ensure useful progress. Each new start becomes increasingly difficult.

There are few intermediate rewards. Try out some of the material in a lecture and seminar, persuade colleagues whose judgment you respect to read it, and you get back comments and letters where the only uncertainty is how many kind words precede the first "but". Suppress your own doubts, try to forget that you failed to get hold of a particular journal article in connexion with your argument in chapter three, or that you have not really faced up to a possible objection to a point you make in chapter seven, and you are laden with guilt.

Anyone who tries both to administer and to write knows which is harder to do really well, and knows that the kind of productivity that really counts in the long run neither comes easily nor is bought cheap. How, without such knowledge, could we begin to understand some of the attitudes, anxieties and antics of our more scholarly colleagues?

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Invaluable after hours and at weekends; that a good way to get a lecture down on paper is to deliver it from notes to a microphone in an empty room and edit the transcript for final delivery.

Higher degree students find it useful if I write numbers in the margins of their drafts, dictate a comment or suggestion linked to that number, have the comments typed down the left-hand side of a piece of paper, and ask for their comments on my comments before we have a session together to discuss progress.

A half-hour long distance conversation in which two or three people at either end use a telephone amplifier can sometimes save a lot in travel and fares and frustration. Not, however, on sensitive issues as voices alone often carry false nuances, especially if you don't know the person.

A few minutes spent dictating a brief note for the record into a portable dictaphone before each meeting and individual discussion on a busy day keeps the mind clear for the next encounter. To spend 10 minutes or so at the end of an informal meeting, while those concerned are still present and able to comment, dictating a record of the decisions, agreements and decisions which can be typed and distributed, saves a great deal of time and subsequent efforts to remember.

It is uncomfortable to dwell amidst the purities of pedantry, but we supporters of verbal law and order in the face of the cold-blooded murder of the English tongue have recently had to face an alarming rise in illiteracy.

Verbalists are the increase, and lesser forms of stylistic delinquency seem to be rising fastest in the youngest category of offender. Language rape is increasing, and word-lifting from technical enterprises is threatening the entire communications structure of our society. Since the old-fashioned teacher on the beat has given way to more comprehensive forms of language control, the connexion between words and local experience has been broken down by the spread of large-scale verbalage. The very survival of English is at stake.

No, not a resolution of college academic board or an Association of Teachers in Colleges and Departments of Education meeting in 1975, but an extract from a letter written by Winifred Mortier, then principal of Whitelands College, in 1933.

Hardly fair, of course, to equate the two situations. Yet it is still our ability and willingness to pay that is at the heart of it. Just think what might be done if no class was larger than 15, if no teacher taught for more than 15 to 20 hours and spent the rest of the week preparing and conferring in a first-class teaching resources centre, if there were buildings and equipment to match.

But we know the public expenditure implications and inflationary effects of even marginal improvements in staff-student ratios, we know that research does not support the idea that such marginal changes will bring about corresponding educational gains, we know that it is undesirable to produce many more teachers than the authorities can afford to employ, and we seem to have lost, in many cases, our faith in an improved primary and secondary education as one of the means to obtain a level of resources that would make real gains possible.

So we don't campaign. We swallow our medicine and try to believe that something good will come out of amalgamations, diversification, the training of most primary and some secondary teachers under further education regulations and the rest in the universities. We trust that the new rationalising committees will be a vast improvement (not just administratively, but in the quality of the things they encourage) on the much-maligned area training organizations.

We hope that the coherence and the identity of teacher education will not get lost in the process of taking everything apart and putting it together again. We try to avoid irresponsible postures, to play down the importance of binary lines, and occasionally seem to doubt even the civil servants in the sobriety of our statements and the realism of our assessments. And sometimes we wonder what posterity will think of us.

William Taylor

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'The survival of English is at stake'



KENNETH MINOGUE

Since the decline of the classics the only infallible mark of the education of a person is the quality of his or her command of the English language.

I am a scourge of the split infinitive, and in waging my small local war for the cause of verbal grace, I often find myself regarded with wide-eyed wonder (as you can tell from school boys who have been taught some such idiosyncrasy as that language is a tool of communication and therefore find offensive the quibbling of someone who obviously knows what it is they are trying to communicate).

It is uncomfortable to dwell amidst the purities of pedantry, but we supporters of verbal law and order in the face of the cold-blooded murder of the English tongue have recently had to face an alarming rise in illiteracy.

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In at the death—British scientists join the race to find a black hole

Space scientists from Southampton and Bristol universities left this week for Texas, to carry out an experiment which may answer one of the most important questions in modern astronomy. Do "black holes" really exist?

The team, under the direction of Dr David Ramsden, of the Southampton physics department, plan to fly a helium-filled polythene balloon to a height of 125,000 ft (almost 24 miles) carrying an array of 109 X-ray detectors which should be able to identify "black holes" in space.

These have never been observed by astronomers although data from a number of different sources suggests that one component of the double system Cygnus X-1 is really a black hole. This is the final stage in the death of a star when it has passed through the intermediate phase of being a white dwarf and a neutron star. No light escapes from the interior of a black hole, and anything within reach is sucked into its vortex.

There is intense competition among the world's astronomers to be first to identify a true "black hole", and the Massachusetts Institute of Technology, the University of California at San Diego, Tubingen University, Leiden University and others are Southampton's principal rivals. Where the British hope to have the lead is in the size of their detector, which is one of the largest ever built.

It was constructed in the mechanical engineering workshops at the university and is about 1ft by 10ft. The entire experiment was designed at Southampton, but the Bristol group, under the direction of Dr Rodney Hillier, designed the X-ray detectors.

It will be the fourteenth launch the group has made from the Texas site south of Dallas. An earlier attempt, which was a complete group launch, would give them an undisputed lead in the hunt for a

black hole had to be cancelled because of poor weather conditions—a major hazard with balloon-borne X-ray astronomy. Launches are usually made in some darkness, just before sunrise or just after sunset.

Texas has been used for launching balloons because of the excellence of the facilities provided by the National Centre for Atmospheric Research, a research unit of the National Science Foundation. Balloon work is just one facet of the facilities. Even though the fully laden balloons rise at about 1,000 feet a minute, the danger to commercial air traffic is no great.

But even using an American balloon and American launch facilities, all of which have to be paid for, X-ray astronomy from balloons works out considerably cheaper than the more exotic and spectacular satellite or rocket research. The present launch will cost in the region of £16,000, all paid for by the Science Research Council.

The rocket and satellite experiments have a disadvantage of taking place in the complete absence of any atmosphere (which interferes with the reception of the X-ray signals) but there is only about 0.4 per cent of the atmosphere left in the regions which can be reached by balloon, and the balloon detectors are tuned to X-radiation of a wavelength which is affected comparatively little by the residual atmosphere.

Furthermore, the balloon technique means that the astronomers can observe for much longer periods of time than if rockets are used. Dr Ramsden expects to be able to measure X-rays from a variety of sources for a total of 10 hours.

In addition to the exciting work on Cygnus X-1, Dr Ramsden is also keen to observe the variable star Hercules X-1 which sends out pulses of X-rays in several dif-

ferent patterns which astronomers are anxious to understand more clearly.

Once the balloon has been safely brought down again with the valuable detector (and Southampton has never lost a balloon or detector yet), which Dr Ramsden attributes to the skill of the launching site operators who can predict to a couple of miles where a balloon will land, together with the masses of honeycomb packing he uses to protect the detector against impact, the real work is only just beginning.

All the yards of data must be fed into a computer, and it is expected that several months of computer time will go into the analysis of next month's experiments. Dr Ramsden and his team should know by Christmas whether or not they have spotted a black hole.

He is already making plans for new flights, however, and the SRC is considering his application for funds to construct the next generation of X-ray detectors, smaller units which will enable his balloons to fly higher and higher.

A new idea is to set up a site in Sicily from which to launch the balloons with the prospect of recovering them in the United States. This would give a greatly increased observation time.

But such is the pace of progress in space research that Dr Ramsden is already having to consider projects for 1980 when Spacelab the orbiting American laboratory satellite should be in full operation. Spacelab will be expensive, but should provide the best possible conditions for observing the universe. But until then, Dr Ramsden reckons that his balloon flights provide a very cost effective way of providing new and important information about the life and death of stars.

Alan Cane



The science and technology block at the City of Birmingham Polytechnic.

A sunny, low-cost outlook on 'the Costa del Aston'

Although lecturers mockingly refer to the desolate neighbourhood environment as "the Costa del Aston", and although it is one of the most poorly provided polytechnics, Birmingham Polytechnic is flourishing.

A students' union report claims that per student expenditure at £777 is nearly £500 below the average of £1,274 for polytechnics generally, and nearly £1,000 below that of the country's highest (£1,769).

Evidence of understating is immediately obvious: there are no sports facilities, no polytechnic-owned accommodation and union facilities are limited to those made available by Aston University students' union. The polytechnic's estimate that overall spending is now running about 20 per cent below minimum requirements.

Scratch beneath the surface and further under-provision becomes evident. There are for instance, no welfare services at the polytechnic, and these needing help in finding a flat or lodgings are thrown upon the resources of one part-time officer at City Hall.

Yet, despite these disadvantages, there is no shortage of students wishing to study at the polytechnic.

A breakdown of courses shows that only 20 per cent of students are enrolled on science and technology courses, whilst arts and design courses account for 25 per cent, forming one of the largest proportions of its kind in Britain. The largest student enrolments, however, are in business studies and commerce.

Student demand remains very strong, perhaps reflecting the polytechnic's non-science and technology bias. With about 4,700 full-time equivalent students and nearly 6,000 part-time students, a majority of courses are over-subscribed.

Art and design, sociology, politics and some science and technology courses vocationally-oriented towards the medical profession and building industry are all highly popular; only some of the remaining science and technology courses have vacant places.

The polytechnic also boasts a lower than average drop-out rate and a more economic staff-student ratio than any of her sister institutions of 8.8:1.

Academic success at Birmingham seems to occur in spite of the adverse conditions. Mr Stuart Wilson, Smethurst, in the director puts it rather bluntly: "There is no doubt that the academic progress we have made has been almost a miracle."

"The staff have worked bloody hard in tough conditions to achieve what we are in a very high degree of commitment to the present. Staff here have split blood to get it right."

He believes in a system of open government, and, paradoxically, this has caused difficulties among staff who are not used to arguing their case in the open, preferring to wait for others to give the word.

Some teachers, in the building department, for instance, objected to having to fight political battles to get their course accepted.

Others remember the previous technical college days when one could get a principal's permission before any decisions were difficult to adjust to being told to make up

the responsibility. Mr Malcolm Ford, dean of art and design, and a former vice-principal of the former Birmingham Art College, has found the system of open government a very satisfactory solution to a polytechnic which is short of resources.

The major role of the academic planning committee, a sub-committee of the academic board, is a important element in the democracy of the institution. It acts as the scrutinizing body for all academic plans and, unless, a course receives its approval it is very unlikely to be started.

"More often than not a restriction on resources sharpens up the submission before the academic planning committee. Faced with a shortage of resources academic tend to give their proposals a keen edge," said Mr Ford.

Unlike some other polytechnics Birmingham seems to have cohesiveness which, in spite of being scattered across 13 separate sites, welds the staff together. They seem to be more aware of the need for economic constraints and the problems of planning in a world where the academic cake is becoming smaller not larger.

A number of departments appear to practice their own constraints and were aware of the practicalities of offering new courses in a tight situation.

Mr Robert Potter, head of the department of three-dimensional design, for instance, laid down his own policy of the best utilization of resources.

This did not mean, however, that cost-consciousness had an overriding priority over academic content. "Staff are alert and alive to present day requirements. In a very short time we have expanded the variety of our courses so we offer degree level work, part-time work and postgraduate work in a number of fields," he said.

The reputation of his department does not seem to be impaired by shortage of funds either. The polytechnic's postgraduate diploma, in courses in interior design, furniture design and jewelry have an international reputation.

Students seem unaware of the cramped conditions and the majority speak warmly of the opportunities available at the polytechnic and in local industry.

In comparison with other polytechnics, Birmingham certainly compares badly in terms of resources. Academically, however, while not having the research strengths of say, City of London, it appears, more alert and outward looking than either Leeds or Tees side.

Mr Smethurst faces serious difficulties in raising finance to expand the institution, partly because of the Government's financial cutbacks and partly because of the local view that West Midlands finance should be concentrated on prestige projects like the National Exhibition Centre rather than spending small sums on improvements.

The polytechnic is unlikely to expand before the mid-1980s when its main aim should be to take shape. Nevertheless, it could prove a better bet for future investment than many other institutions.

David Henck

Action instead of contemplation in the polys

As the Arkwrights, Dalton, Faraday, Telford—uneducated or self educated men—led the industrial revolution and opened up new areas of knowledge, skills and power, other more articulate thinkers were exploring the idea of a liberal education, Patrick Nutgens (right) says. To Newman, the answer to the transformation of society by the industrial revolution was a liberal education.



MacMurray makes the point that many of these dualisms are surreal. For example, the mind/body problem is in fact "no problem but a pure absurdity". In the face of our problems, for example our commitment to a planned society in which planning must involve the unity of theory and practice, it is essential to eliminate the traditional dualism and look at experience as a whole.

"The unity of experience as a whole", he writes, "is not a unity of knowledge, but a unity of personal activities of which knowledge is only one". Where does he find that unity? He finds it in action, for action "is a unity of knowledge and movement". He rejects dualism "through asserting the primacy of the practical". For "it is the practical that is primary; the theoretical is secondary and derivative".

"That is surely a reversal of what we usually assume. There are good reasons for it. In thinking the mind alone is active. In acting the body indeed is active, but also the mind. Action is not blind. When we turn from reflection to action we do not turn from consciousness to unconsciousness. When we act, sense, perception and judgment are in continuous activity along with physical movement."

MacMurray's thesis seems to me directly relevant to the changes in education which I have been tracing. It is not just that through reflection, but for action for creating things and finding solutions in the everyday world of man.

It was as if the structure of society had been especially shaped to emphasize the conflict, always potential but now actual, between thought and action. That bifurcation of higher education in the nineteenth century was however not just the result of a pragmatic solution to a practical situation; it rested I believe upon a deeper characteristic in Western European thought. That is the dualism that has characterized so much of our thinking since the Enlightenment.

There is the obvious dualism of theory and practice, but there are many other aspects—mind and body, mind and matter, appearance and reality, subjective and objective. It has almost become a common habit of thought that we investigate an apparently confused problem, sorted out into two mutually antipathetic alternatives and resolve a decision in favour of one or the other.

The dualism with which I am concerned in this paper is that between thought and action.

Two thought-provoking books by John MacMurray, the former professor of moral philosophy whose class I was lucky enough to attend for a year in the University of Edinburgh in the early 1950s, this problem is exhaustively discussed (John MacMurray: *The Self as Agent and Persons in Relation*).

Now, in my own words, the basic unit for our kind of society is not the individual person or the individual student, it is someone in relation to something someone else. That is what is involved in action. There is no such thing as action in isolation. Action involves the reaction or interaction of someone else.

Or to summarize, the dualism of thought and action is a nonsense; the unity of experience requires action; action involves more than one person in isolation; but paradoxically, it is the key to personal development.

What are the implications of this? Firstly I think it means that the starting point for our educational planning, both as regards courses and disciplines, requires rethinking in terms of groups of people, the relationships between them and between them and the studies involved.

For example, the measure of success should not in principle be merely that someone has acquired so much knowledge; it should be that someone has acquired the skill to do something effectively with it. That is peculiarly difficult to examine, though with every year we develop more ways of looking at it.

Secondly, it means that our systems of promotion and staff development should be based not just upon scholarship and learning, but upon the ability to carry out tasks—in this case primarily the task of teaching. That, of course, at the level of higher education, is not as simple as it sounds.

Thirdly, there are implications for the kind of studies involved. The very nature of knowledge itself is affected by the use to which it is to be put and the modes of thinking which encompass it. I suspect that facts, or what pass for facts, are actually different when they are seen in a context of action and not in a context of reflection. For action involves the recognition of things as such.

Let me now try to bring those three comments together and draw a few general conclusions. It follows, I believe, from the implications I have outlined, that the sources of material for our education, the generators of our total experience, are not simply words and certainly not just books. They are, so to speak, out there.

It must be the case—and here I come full circle—that such knowledge cannot be acquired in isolation or privacy; it requires co-operation. And that is true of society as a whole. It may well be the case that a study in depth can be carried through in isolation. But the decisions that study undoubtedly demands collaboration.

Let me try to sum up and draw a very general conclusion, with some quotations which seem to me valuable. If the task I have outlined is the right one, there cannot be one place or one kind of institution of higher education, but many. The universities become, the more demand there is for such courses from potential students and from society, the more varied and complex will all the institutions be.

At the end of the day the institutions may well end up as different as the organisms of the sense that organisms of varied and multiple kinds resemble each other in that parts of them may be identical.

In the meantime it cannot do harm to define some of the objectives of the different institutions and parties. For example, I could not dissent from the statement that the basic ideas or values which university must stand by, given by Sir Walter Moberly in *The Crisis in the University*. They are:

● The conviction that the things of the mind are worth pursuing, developed to an intensity at which it becomes an intellectual passion.

● The duty of intellectual thoroughness, of pursuing the argument where it may lead.

● The obligation to be meticulously accurate in dealing with empirical evidence, also.

● The obligation to approach controversial questions with the temper of a judge rather than of the advocate of the notorious "expert witness".

● Insistence on freedom of thought and publication.

● The conviction that the university has indeed a social responsibility, but that this is first and foremost a responsibility for focusing the community's intellectual conscience.

If those are the objectives of the university, the best statement I have read about the objectives of students is that given in paragraphs 107 and 108 of the White Paper, *Education: a framework for expansion, 1972*.

"The motives that impel sixth formers to seek higher education are many, various and seldom clear-cut. A minority wish to continue for its own sake the study in depth of a specialized subject to the top of their bent. It is crucial for the world of scholarship, research and invention that their needs should be met. This has always been a leading function of the universities and must remain so."

"Some students have a specific career in mind. A larger number are anxious to develop over a wider field what the Robbins committee called the general powers of the mind, but not without questioning whether a specialized honours degree course is the best way of achieving this."

"Some ask for no more than a stimulating opportunity to come to terms with themselves, and to discover where their real interests and abilities lie. Others have no better reasons than involuntarily to fall in with the advice of their teachers and the pressure of their contemporaries. But not far from the surface of most candidates' minds in the neck belt that higher education will go far to guarantee them a better job. All expect it to prepare them to cope more successfully with the problems that will confront them in their personal, social and working lives."

It is important that the last and most widespread of these expectations should not be disappointed. The Government has sympathy with the sincere desire on the part of a growing number of students to be given more help in acquiring—and discovering how to apply—knowledge and skills related more directly to the decisions they will face in their careers and in the world of personal and social action."

That statement is a valuable corrective to Moberly. While he states clearly what the university must do, it is not what the polytechnic is essential to do. The polytechnic must do this way. The universities can exist without the polytechnics; the polytechnics cannot exist without the universities.

It is possible—and to my mind the ultimate challenge—that the polytechnics if fully developed could be, not the primary, but the most central and comprehensive places for higher education, embracing the technologies and social sciences, the arts and professional studies, all within the general context of application—a vast work in "the art of the utilization of knowledge". Their scope is enormous and so is the challenge.

The question is whether they can create a unity, not negatively by rejecting the traditional dualism, but positively by achieving a concrete reality in their day to day activities. Edited text of an address to the Headmasters' Association conference.

Dr Nutgens is director of Leeds Polytechnic.

GMC should control standards of graduate clinical training

Conclusions and recommendations on education and registration by the Merrison committee of inquiry into the regulation of the medical profession

In general, a precondition of the independent practice of medicine.

The planning of all stages of medical education should be coordinated.

The medical legislation should be amended to impose a duty on the GMC to promote high standards of medical education and to ensure the completion of an undergraduate course in medicine should confer the right to "restricted registration".

The GMC should continue to have the power to refuse to accept that a primary qualification is adequate for the purposes of registration; and should continue to have powers to visit and inspect medical examinations and to visit medical schools.

The GMC should develop further its informal methods of controlling undergraduate medical education, particularly by involving external examiners.

The GMC and the University Grants Committee should develop machinery to exchange information.

The important task of making a clinician of the graduate; and its unsatisfactoriness owes much to the present system of medical education, apparent in the control of the year.

The period of general professional training recommended by the Royal Commission on Medical Education does not offer a remedy for the present inadequacy of educational concentration on the task of making a graduate into a clinician.

There are three recognizable stages of clinical responsibility, namely practice under supervision, independent practice, and practice carrying responsibility for the care of the patient at a high specialist level and these stages correspond to the three stages of registration.

The NHS specialist registration system is weak from a practical standpoint, too flexible as regards standards and an obstacle to the coordination of the planning of all stages of medical education.

The postgraduate councils and the regional postgraduate committees associated with them are an excellent means of resolving problems involving the interaction of resources and standards; such means of resolution being particularly necessary in the postgraduate field.

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The GMC and the University Grants Committee should develop machinery to exchange information.

The important task of making a clinician of a graduate requires the introduction of a specialist registration system for "graduate clinical training".

General, or family, practice should be recognized as a specialty just like other areas of medical practice.

Control of the standards of specialist education should rest with the GMC by its maintenance of a specialist register.

The reorganisation of specialist medical education should be founded on the work of the Royal colleges and joint committees on higher training.

Control of the standards of individuals undergoing specialist training should rest on the standards of any body given that responsibility by the GMC.

Detailed arrangements for the control of standards of specialist education by the GMC should be worked out in the give and take of wide consultation.

The GMC should develop information methods of controlling graduate clinical training.

The universities will require more tutorial resources to discharge the responsibility we propose for them in relation to graduate clinical training.

Overall control of the standards of graduate clinical training should rest with the GMC and, in particular, the GMC should be empowered to refuse to accept medical schools' certificates of completion of graduate clinical training.

The GMC should be provided with reserve inspectorial powers in relation to graduate clinical training.

The GMC should develop information methods of controlling graduate clinical training.

Successful completion of graduate clinical training should confer the right to "general registration".

The specialist register should be indicative in character. The status of specialist registration should be protected by the GMC.

Continued registration should not depend on continued participation in education, but the GMC should encourage the development of continued participation.

Report of the committee of inquiry into the regulation of the medical profession, HMSO, 1975, Cmnd 6918, p. 75.

NOTICE BOARD

Chairs

Dr J. W. Murray, in present lecture in geology, Bristol University, has been appointed to the chair of geology and head of the department, Exeter University, from October 1. He succeeds Professor Scott Simpson, who is retiring.

Dr Ole Hølder Petersen, associate professor of physiology, Institute of Medical Physiology, Copenhagen University, has been appointed to the Sykes Chair of Physiology, Dundee University, from October 1.

Recent publications

Not Academic but you can dance to it more cartoons by Chris Williams (NUS Publications, 4, Kingsley Street, London WC1R 0DU, 2.5p) includes some completely new cartoons as well as some which have already appeared in *The Times*. New material includes *Student and the Careers Research Advisory Centre*.

Marine Transport—a guide to libraries and sources of information in Great Britain, by D. N. Allan et al. for the Marine Librarians' Association's first publication is designed for all those who are involved in shipping and marine technology (published under the auspices of the Library Association, available from the Association, 21, St. Martin's Lane, London WC2R 1 2P, for members of the L.A. and L.M. £1.50 to non-members).

Medical Fitness of teachers and of entrants to teacher training, Circular 4/75 which replaces circular 249 AM 418 and their addenda incorporates the changes already exhibited in the arrangements for the medical examination of entrants to a course of training for teachers and to the teaching profession and provides guidance and information on current practice for colleges, employing authorities and medical officers (available from the Department of Education and Science, Elizabeth House, York Road SE1 7PH).

Corrections

The following corrections apply to the issue of April 18, 1975, of *The Times Higher Education Supplement*. In the notice of appointments, Mr Roger Bennett's title was incorrectly given as Dr.

Under grants, the department of biology of York University received £10,422 from the MRC and not £1,422.

Appointments

Universities

Cambridge

Clare College

Elected to a research fellowship: Kathleen M. Marriott. Elected to school teacher fellowships: J. L. Isaacs (from 1976); O. M. Ward (Easter term 1976); E. Reid (Michaelmas Term 1976).

Fellowships

The following have been elected Fellows of the Royal Society: R. J. I. Beverton, secretary of the Natural Environment Research Council, London; G. M. Binnie, consultant for Binnie and Partners, Chartered Civil Engineers, London; Dr E. G. Bowen, counsellor (scientific) at the Australian Embassy, Washington, DC; Dr S. H. U. Bowie, assistant director and chief chemist of the Institute of Geological Sciences, London; Professor G. M. Brown, professor of geology, University of Durham; Professor A. D. Buchanan, professor of chemistry, University of Cambridge; Dr P. C. Caldwell, reader at the department of zoology, University of Bristol; Professor J. Charnley, consultant orthopaedic surgeon and director of the Centre for Hip Surgery, Wrightington Hospital, Lancashire, and professor of orthopaedic surgery, University of Manchester; Professor J. W. Christian, professor of physical metallurgy, University of Oxford.

Dr B. A. Cross, director of the Agricultural Research Council's Institute of Animal Physiology at Babraham, Cambridge; Dr K. Dalziel, lecturer in biochemistry, University of Oxford; Professor P. de Mayn, director of the Pharmacology Unit and professor of chemistry, University of Western Ontario, Canada; Professor J. M. Dodd, Lloyd Roberts professor of zoology and head of the department of zoology, University of North Wales, Bangor; Professor A. Erdelyi, professor of mathematics, University of Edinburgh; Dr D. A. Haydon, reader in surface and membrane biophysics at

Manchester

Senior lecturer: L. F. Brockington (psychiatry). Lecturers: C. E. Bounie (town and country planning); F. D. Hollander (medicine); L. R. Solomon (medicine for dental students); H. V. Scott (obstetrics and gynaecology); L. I. Gaved (ophthalmology); D. A. Edwards (computer engineering).

the physiological laboratory, University of Cambridge; G. N. Humphries, head of the medical systems section of RMIT's central Research Laboratories, Melbourne.

Dr A. M. Lane, theoretical physicist at the Atomic Energy Research Establishment, Harwell; Dr A. R. Lang, reader in physics, University of Bristol; Dr A. L. McLaren, director of the Medical Research Council's Human Development Unit at University College, London; Professor R. Mason, professor of chemistry, University of Sussex; Dr C. Milstein, joint head of the Protein Chemistry Study of the Medical Council's University of Cambridge; Professor P. A. P. Moran, professor of statistics and head of the department of statistics, Australian National University, Canberra; Dr R. C. Rainey, senior principal scientific officer at the Centre for Overseas Pest Research of the Ministry of Overseas Development.

Professor E. C. Slater, professor of physiological chemistry, University of Amsterdam; Professor R. O. Slattery, professor of environmental biology at the Research School of Biological Sciences, Australian National University, Canberra; Professor D. C. Smith, Melville Willis professor of botany, University of Bristol; Professor B. P. Stuchlik, professor of physics and chairman of the division of engineering science, University of Toronto;

Dr G. P. L. Walker, reader in geology, Imperial College of Science and Technology, London; Dr R. Weck, director of the Wellcome Institute, Cambridge; Professor J. Whalley, Sheridan professor of botany, University of Oxford; Professor J. Wilson, senior professor of astronomy and director of the observatory, University College, London; Professor E. C. Zeeman, professor of mathematics and director of the Mathematics Research Centre, University of Warwick.

Forthcoming events

An exhibition entitled "Austrian Graphics" featuring the graphic work of Rudolf Schoenwald, Georg Elser and Alfred Hrdlicka is on show at the University Library, Essex University. The exhibition will then move to the University of East Anglia in May.

"Europe's Future—When Britain stands" is a one-day conference organized by the United Kingdom section of the European Association of Teachers, is being held on May 3 at the Grosvenor Hotel, Victoria, London, SW1. Speakers include Dr Guido Brunner, member of the Commission of the European Communities responsible for Research, Science and Education; Dr Eric Briant, and the Rt Hon Geoffrey Rippon. Details from Miss M. E. Duce, 20 Brookfield, Highgate West Hill, London NW6 6AS.

An open forum on "Neglected Research and Social Priorities" is being held by the Council for Science and Society on May 3 at Conway Hall, Red Lion Square, London, WC1. The forum will be chaired by Professor Michael Nanton and speakers include Magnus Pyke (Nutrition Education), Walt Patterson (Energy), Colin Tudor (Agriculture) and Alastair Calder (Health). Tickets £5.00, £2.50 for students, O.A.S. claimants, unemployed. Details from the Council for Science and Society, 4 St Andrews Hill, London, EC3V 3DV.

Public lectures at the Courtauld Institute of Art are taking place at 5.30 every Tuesday from April 29 until June 4. Apply to the registrar's secretary, Courtauld Institute of Art, London W1P 0BE. The fee for each lecture is 50p.

A seminar on "The Evaluation of Teaching" is being held on May 13 at the University of Birmingham. Discussions include "The Evaluation of Teaching—Why and How?" and "The Evaluation of Teaching—The Role of the Teacher". Tickets £2.50. Details from: Dr R. J. D. Rutherford, Advisory Service on Teaching Methods, School of Education, University of Birmingham, PO Box 363, Birmingham B15 2TT.

An exhibition of modern figurative sculpture organized by *The Illustrated London News* and the Greater London Council is being held from May 22 to July 9 on the West and Yucca Lawns of

Holland Park, Kensington. Works by Kenneth Armitage, Michael Ayrton, Leonard Bushkin, Ralph Brown, Reg Butler, Lucette Cantwight, Lynn Chadwick, Ernst Elsemyer, Roy Noble, Andre Wallace and David Wynne will be shown. The exhibition will be open daily, admission 20p.

"Financing Medical Education", a conference organized by the Association for the Study of Medical Education, will be held on May 28 at the London Hospital Medical College, Whitechapel, London E1. The conference will examine the problems caused by the current financial cutbacks in undergraduate and postgraduate medical education. Chairman: Professor Sir Hugh Robson, principal and vice-chancellor of the University of Edinburgh. Speakers will include: Professor J. A. Bottomley, professor of economics, Bradford University; and Dr J. E. Dunworth on the cost and political economy in university education. Further information from Mr Rogers, ASME, 150b Perth Road, Dundee DD1 4EA.

Forthcoming meetings of Siscen will be held on the following dates: Science in a Social Context, Harlech, August 2-9; Science and Society—Sixth Form teachers, Harlech, August 9-16; Science in a Social Context, Jasper, Alberta, Canada, August 23-30. Further information from Dr W. F. Williams, project coordinator, Science in a Social Context, Leeds University, Physics Administration Building, Leeds LS2 9JT.

A Gala Concert is being held in the hall of the Goldsmiths College, University of London at 7.30 pm on May 17. The programme includes works by Malcolm Arnold, Mozart, Bernstein, Schnittke, Liszt and Mendelssohn as well as songs from the Proms. Tickets 25p, children, students, pensioners 25p. Details from the secretary, DAS, Goldsmiths College, London, SE14 6NW.

The Cultural Committee for Chile solidarity campaign is organising a day of film, theatre, music and poetry, entitled "The Cultural Committee for Chile", at the National Institute of Theatre, Culture and Socialist Politics in Chile R. J. D. Rutherford, Advisory Service on Teaching Methods, School of Education, University of Birmingham, PO Box 363, Birmingham B15 2TT.

Noticeboard is compiled by Patricia Santinelli and Penny Bruce

R. Y. EBIED and M. J. L. YOUNG describe new evidence on the origin of universities

Did the Arabs invent the university?

Three important types of institution were part of the legacy of the Middle Ages to the modern world—hospitals, observatories and universities, and of these it has long been accepted that the first two were innovations produced by the Arabian civilisation of Islam.

Although the Greeks invented a number of astronomical instruments, the observatory as a permanently organized and specialized institution came into existence under the auspices of the successors, or Caliphs, of the Arabian prophet Muhammad. The first permanent observatory of which we have record was that founded by the Caliph Ma'mun (reigned AD 813-833) in his capital city of Baghdad about the year 830.

The most important of the Arabs' many contributions to medicine in the Middle Ages was the foundation and running of hospitals. If they did not actually invent the hospital as an institution, they devoted such attention to the organization, financing and upkeep of hospitals that many of these features are still familiar characteristics in their present-day successors. The Arabs also circumstantially evidence to show that the third great medieval institution, the university, was to a large extent an invention of Islamic civilisation. There has, however, long been a reluctance among western historians to admit that resemblances between Muslim and Christian centres of higher education in the Middle Ages were anything more than a series of coincidences, even though there has never been any dispute that a large proportion of the university textbooks used in the Middle Ages were translated from Arabic.

Among the authors of scientific, medical and philosophical texts, books, Muslim scholars such as Avicenna, Averroes, Albatagnius, Alfarabi, Avempace, Avenzoar, Albucair, Arzachel and Alpetragus loomed very large. It was not until the early evidence that there was an educational influence of the civilisation of Islam on Christendom, these names might be thought sufficient to suggest the strong possibility that the European universities which were to be founded in the Middle Ages had very important original links with the civilisation which produced such works.

In fact, evidence is accumulating which indicates that the borders of medieval Islam that the origins of the medieval university must be sought.

To begin with, there is the undisputed fact that Muslim centres of higher learning were functioning well over a century before the earliest ones to be founded in Europe. The mosque-college of al-Qarawiyin in Fez (Morocco) was founded in AD 859, that of Cordova in the first half of the tenth century, the mosque-college of al-Azhar in Cairo in AD 972 and the House of Wisdom in the same city in the eleventh century.

In Europe the appearance of the first centres of higher learning was much later—the universities of Bologna, Paris and Montpellier were certainly not in existence earlier than the twelfth century.

When we examine the history of the universities, we find that the earliest form of degree which they granted was a *licentia docendi*, that is, a "licence to teach". The medieval Islamic universities granted more than one degree, and the *licentia* was the highest. In other words, how can what has been hitherto dismissed as a mere series of coincidences be shown to be in fact a series of cultural borrowings?

One of England's most eminent orientalist, the late Professor Alfred Guillaume, proposed (in the first edition of *The Legacy of Islam*, Oxford, 1931), that the pattern of the curriculum in Islamic Western universities might be found if a satisfactory explanation could be produced of the medieval term *baccalarius* or *baccalariatus* (the original form of our "Bachelor" in its sense of the holder of a first university degree).

In this connection, he pointed out that the etymology of this word given in the Oxford English Dictionary can hardly be taken seriously (in a desperate attempt to save the Latin origin of the term it suggests an ultimate origin from *vaccu*=cow).

Guillaume went on to point out that *baccalarius* may well have been some Arabic academic phrase such as *bihagh al-risala* (that is, "with the right to teach on the authority of another"), bearing in mind that many distorted Arabic words were taken into Latin and the European



Avicenna (AD 980-1037), physician and philosopher, lecturing.

the early Christian universities, and it is therefore not surprising that each individual professor issued as "cheque" (from Arabic *sakk*), "triffl" (from Arabic *tariff*), "admiral" (from Arabic *amir al-hajra*), and many more Guillaume admitted, however, that he had never actually come across this phrase *bihagh al-risala* in any Arabic document, and his proposed etymology has up to now remained only an interesting speculation.

Recent investigations by the present writers, however, into various surviving examples of medieval and later *hazrat*, have shown that not only was a virtually identical phrase to that suggested by Guillaume actually used in Arabic academic documents, but that it was used in precisely the sense required by the suggested etymology. Our study of the term, and its implications for the history of the medieval universities is to appear shortly in *The Islamic Quarterly* (London) with full documentation.

We now come to the point of greatest significance, the fact that the earliest *hazrat* (in a manuscript preserved in Cambridge University Library) in which the phrase "*bihagh al-risala*" has so far been found dates from AD 1147, while the first occurrence of the term *baccalarius* in Europe in the sense of the holder of a first university degree does not occur before AD 1231, the year in which a system of degrees was established at the University of Paris by the bull *Parenus scientiarum* of Pope Gregory IX.

Thus it seems likely that our university term "Bachelor" derives from a phrase used in Islamic university diplomas, and taken with the other significant features of resemblance mentioned above, strongly implies that European universities were modelled on those of Islam.

The study of Islamic civilisation has been relatively neglected by European scholars, and few European universities make adequate provision for teaching and research in the fields of Arabic and Islamic studies (of over 40 universities in Britain, only 10 make any provision at all for teaching Arabic, and of these departments exclusively devoted to Arabic studies). It is, therefore, likely that further research in these fields will strengthen our understanding of the connection between medieval Islamic and Christian institutions of higher learning, and will confirm that in the organization of these institutions the Muslims were not only the predecessors of Europe, but also its exemplars.

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Fixed term contracts: two options

A recent decision of the Court of Appeal has important implications for some academic employees. Since 1972, there has been a right to claim compensation from an employer where an employee has been unfairly dismissed. "Unfair" means for no substantial reason, or unjustly in all the circumstances, including the procedure of the dismissal. A lecturer who was sacked by a university because he had done no research would be able to claim compensation (now up to £5,200) if he had not been warned that such a result might follow and allowed the opportunity to improve his performance.

The law provides that it is for the employer to justify the dismissal and not the other way round. Originally, the employer could not make his choice of dismissal to an industrial tribunal unless he had been employed for a minimum of two years before being sacked, but from this month the qualifying period has been reduced to six months.

Under the normal way it is not possible for an employer to "contract out" of his liability for unfair dismissal by employing people on terms that they will not be entitled to compensation if they are dismissed since otherwise much of the statutory protection would be lost. The legislation, however, does allow the employer to exclude the right to compensation where the employee (i) is employed under a contract for a fixed term (a definite period rather than indefinitely until retirement) and (ii) the employee has agreed in writing to exclude his right to claim for unfair dismissal. A similar provision in the Redundancy Payments Act allows the employer to contract out of liability for redundancy payments in these circumstances, though no-one is entitled to a redundancy payment in any case until he has served a minimum of two years.

In practice, some higher education institutions took advantage of this to employ teachers on a probationary appointment for two or three years on the basis of a written contract which said that if at the end of the probationary period the employer decided not to re-employ the man he would have no right to compensation or redundancy payment.

Employers could have put all their employees on fixed term contracts, if they could have persuaded the workers and their unions to agree to it.

The Court of Appeal has now interpreted the law in a way that will render most of these contracting-out provisions ineffective. They have said, in a case involving a programme assistant in the Greek section of the BBC, that a fixed term contract, to comply with the Act, must be literally for a fixed period of time, without any provision at all for termination at any earlier time by the giving of notice by either side. A fixed term is one that cannot be unfixed by notice.

This will have two important consequences. First, many current probationary agreements providing for termination by notice by either party during the probationary period are ineffective to exclude the employee's right to compensation for unfair dismissal or redundancy payment, although they purport to do so. Secondly, the employer in the future will have to make his choice of either party's right to terminate the man by notice during the currency of the term, but is unable to exclude liability for unfair dismissal or redundancy payment. The only proviso is that the Court of Appeal made it clear that the decision did not affect either party's right to terminate the agreement summarily if the other committed a gross breach of contract. Even an employee on a fixed term contract could be sacked if he stole from his employer or could leave without notice if his salary were not paid for several months.

American news

Yale lays down free speech guarantees

from Frances Hill

NEW YORK

All Yale University catalogues, as well as faculty and staff handbooks, should include explicit statements on the fundamental importance of freedom of expression.

This is one of the recommendations of Yale's Committee on the Freedom of Expression, convened after students prevented Professor William Shockley, the Stanford physicist, from speaking at a Yale debate in 1974, by derisive applause and shouted insults and obscenities. Professor Shockley is well known for his view that blacks are genetically inferior and should take part in a programme of voluntary sterilization.

Professor Shockley debated at Yale again last month, after the report's publication, but the visit passed off without disruption or violence. Students picketed the debating hall but remained peaceful. Admission to the debate was by credential and a general ticket, and police guarded the hall.

The committee whose recommendations have been accepted in principle by Yale's administration, urges the "re-education" of students and faculty in the importance of free speech.

Each university department—its dean, faculty and students—should consider the most effective means to clarify and discuss the relation of free expression to the mission of the university, the report says.

These means might include addresses to entering students, discussions in informal settings such as the residential colleges, and special attention to the subject in student publications.

The committee also urges that individuals and groups who object to a controversial speaker should understand the limits of protest in a community committed to the principle of free speech.

The university could also be more effective in discharging its obligation to use all reasonable



Jonathan Edwards College, Yale University.

effort to protect free expression on campus, the report says. It should retain an open and flexible system of registering campus groups, arranging for the reservation of rooms, and permitting groups freely to invite speakers.

But it was entirely appropriate for the president and other members of the administration to attempt to persuade a group not to invite a speaker who might cause serious tension on campus.

"It is appropriate for the university official to explain to the group its moral obligations to other members of the community," says the report. "It is important, however, for the official to make it clear that these are moral obligations for the inviters to weigh, along with other considerations in deciding whether to go forward, and that a decision to go forward is one which carries no legal or disciplinary consequences nor risks of more subtle university reprisals."

The university should have the power to impose sanctions against disrupters at a debate or meeting. Since the university had little power against offenders from outside the university it might require

individuals to produce university identity cards to gain admission. Much can be done to forestall disruption if sufficient notice is given of an impending controversial event, the report says. The administration and others can meet with protesting groups, make clear the university's obligations to free expression, and indicate forms of dissent that do not interfere with the right to listen.

Disruption of a speech should be regarded as an offence against the entire university and one which could lead to suspension or expulsion.

The committee's chairman was C. Vann Woodward, Sterling professor of history.

In a dissenting statement, Mr Kenneth Barnes, a graduate student in economics, says that the majority report is "facile and simplistic" and its recommendations "vague and expedient".

Before free speech could become a possibility, said Mr Barnes, there would have to be "liberation from and increased self-consciousness of the social and irrational factors that condition knowledge and preform the meanings and structures of language".

Brown University students have voted to protest against planned budget cuts by boycotting classes. Attendance is down to 25 per cent or normal.

The administration has proposed reducing the number of faculty members by about 16 per cent, cutting back on counselling services and reducing financial aid to needy students.

The measures are intended to balance Brown's precarious budget, which is expected to show a deficit of \$4m this year. Mr Donald Hornig, president of Brown, is soon to present the plans for approval to a meeting of the University Corporation.

Students are strongly opposing a planned cutback in the "resident fellow programme", which provides for young faculty members to live in student residences and act as the purpose counsellors for students with academic, sexual or psychological difficulties.

They are also opposing the proposed reduction in student financial aid next year by 4.5 per cent. They claim that this reduction will result in fewer black and minority group students being able to afford to go to Brown.

The strength of student feeling over the proposed cuts may be due in part to Brown's history as the first Ivy League college to introduce significant curricular reforms and a policy of recruiting relatively large numbers of black and minority group students.

Many of the reforms have been ended since they were introduced in 1969 and black recruitment has been dropping off over the last few years. There is a feeling among the students that virtually all the 1969 reforms will disappear, and Brown will revert to being a traditional Ivy League institution.

Boston head urges public aid for private colleges

from Angela Stent

CAMBRIDGE, MASS

In a major iconoclastic article in the May issue of the *Atlantic Monthly*, Professor John Silber, Boston University's president, has called for the introduction of massive state and federal aid to private universities.

Seeking to expose the "totally misleading myths" about independent institutions of higher education, he warns that unless there is some rational form of state aid to private colleges, the financial crisis that now threatens American higher education cannot be resolved.

The crux of Professor Silber's argument about why private universities should be entitled to the same government aid as state universities lies in his analysis of the financial performance of the independent colleges.

Although tuition fees could be as much as 10 times higher in private colleges, this figure only represented the price of education. The real financial indicator, however, was cost.

The cost of education in the two sectors should be equal, but in fact the cost of education in private colleges was often lower than in state colleges because of the waste-free use of resources and the frequent duplication of good private facilities on underutilized new state campuses.

In this way, says Professor Silber, the state sector will be competitive with the private and much of the harmful waste will be eliminated.

If the independent state colleges did not "unite in the current rational coordination" the private sector could not survive on current "brink of disaster".

Major cuts may mean closure at 27-campus Wisconsin

from our correspondent

NEW YORK

The University of Wisconsin, a public university system with 27 campuses, may be forced to make drastic cuts in the 1975-77 budget period.

Patrick Lucey, governor of Wisconsin, has recommended that the university cut back by \$2m over the current year, and raise graduate and adult students' tuition fees to cover a further cut of \$6m.

Graduate students would have to pay tuition fees to cover 25 per cent, instead of the present 20 per cent, of the costs of their education, and adult students would have to pay 85, instead of 70 per cent.

With a productivity plan already in the pipeline to re-allocate \$10m from lower to higher productivity projects, the university will be operating on a budget of \$16m less than in the current year if the recommendations are accepted.

Under the recommendations the state of Wisconsin would reimburse the university with \$14m for unrecouped costs. But the university would be without funding for teaching costs for the 6,000 extra students.

The governor has asked the university to consider ways of cutting costs in the long term by reducing the scope of the university system. This might entail closing some of the campuses. Mr Lucey, the university's president, has been asked to report on the long-term economics to the University Board of Regents. It will discuss a question of whether the state has to cut back on higher education.

This will be the first such report made by an American institution of higher education.

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West Germany

Opposition continues to block urgent reforms

from Paul Moorman

BONN

Talks aimed at breaking the long-protracted deadlock over the reform of West Germany's higher education system are due to restart here next week in a mood of pessimism.

One of the main bones of contention is the vexed question of university admissions policy, currently in chaotic disarray.

Also being disputed are the development of comprehensive universities, staff and student representation in decision-making and a drastic shortening of the time allowed to students to take their degrees.

At a more philosophical level there is strong resistance to proposals to make the country's institutions of higher education more aware of the needs of "society".

To do so, it is argued, would threaten the traditional freedoms of teaching and research.

Next week's talks will take place because the government's University Framework Bill, passed by the Lower House (*Bundesrat*), was thrown out by the Upper House (*Bundestag*).

The Upper House has a slim one-vote Opposition majority. It is also composed of representatives of the *Länder*, which are largely responsible for educational affairs and which do not want to see Bonn taking over additional powers in this field.

Even those *Länder* which are controlled by the government Social Democrats are opposed to some parts of the Bill, which attempts to lay down a common basic structural framework to apply to higher education institutions throughout the country.

First drafted in 1970, the Bill has outlived two federal Ministers of Education. Although constantly watered down in the process it is still being steadfastly rejected.

Resistance to it is being spearheaded by the Opposition Christian Democrats and the Bavarian Christian Socialist partners.

When a measure is rejected by the Upper House, there is provision for it to go to a Mediation Committee of both Houses in the hope of arriving at a compromise which can be re-passed through the parliamentary machine.

Everything is still negotiable, is the current government position—though the Opposition has so far shown little willingness to compromise. *Länder* elections being held this weekend in two states may lead to a change of heart if the Social Democrats make significant advances: otherwise the Bill looks like ending up on the shelf.

But because of entrenched Christian Democrat positions it seems unlikely that any progress will be made at this stage. In that case the Bill is expected to be shelved for the rest of this Parliament.

Its fate will be yet another example of the political row threatening to split the economics department.

Political row threatens to split economics department

from Lynn George

AMSTERDAM

Applicants for a university place next year still do not know officially what the exact admission procedure will be. But as a result of last month's Lower House debate on an amendment Bill to the 1972 University Enrolments Act it is almost certain that the last year's lottery experiment will continue.

The Bill, much altered in its passage through the Lower House, is due to go to the Upper House before the summer recess. It seems likely that it will be passed but it will not become effective until 1976 as a temporary admissions procedure for next year will have to be drawn up.

The original 1972 Enrolments Act, which was introduced as a temporary means of curbing the clamour for university places should have ended in 1974.

However, Dr G. Klein, Higher Education Secretary, then extended the Act—which included a number of measures to popularize studies courses, freely admitting candidates with high grades and having a lottery system for the rest of 1975. With his amendment Bill he planned to keep it in operation until 1978 and also proposed introducing a number of other measures.

The group also says that Professor Hogan's action in initiating the dismissal of a member of the department, which has been a tutor on the political economy course, appears to us to be of a provocative nature.

The charges have been denied by Professor Williams, who has said that he is willing to consider any evidence of discrimination, but that so far he has received none, although he has asked for it.

A demonstration was held outside the vice-chancellor's office by students at the end of last month, demanding that he resolve the dispute in the economics department or resign.

The students are also demanding the reinstatement of Mr Brennan, who was dismissed after a series of declarations saying that they took part in the action for which he

was dismissed. Mr Brennan, who was reinstated, has since been asked to resign.

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South Africa

Union cleared of finance allegations

from Louis Holtz

JOHANNESBURG

The National Union of South African Students (Nusas) has been cleared of implied charges that its funds had been misused by members of its executive responsible for the handling of its financial affairs.

The allegations were contained in the report of the government appointed Schlebusch commission of inquiry into the activities of the organization. They were among the charges which led to the banning of a number of Nusas leaders after the publication of the report. It has now been announced that the proceedings are to be instituted against those concerned.

In view of the decision made by the Attorney-General of the Cape, the question has been raised whether the government should not rescind or at any rate review the

five-year banning orders imposed on the former president and other office bearers of Nusas.

A spokesman for the Progressive Party said that the persons concerned should either be charged on other allegations made by the commission against them or finally cleared. Nusas's books, which were seized by the police more than six months ago, have been returned to them.

The possible outcome, according to a nine-university survey conducted by the Academic Freedom and Tenure Committee of the Canadian Association of University Teachers, may be direct tenure quotas and lack of job security on the part of professors whose contracts are repeatedly renewed.

Of the nine universities polled (Acadia, Alberta, Lethbridge, Queen's, St. Francis Xavier, Saskatchewan, Waterloo, Winnipeg and University of New Brunswick), most showed a slight increase in the number of total tenured faculty in the last three academic years.

None, however, experienced a dramatic upsurge, and the increase almost never climbed higher than five percentage points from any previous year in the last three years, usually levelling off at about 3 per cent.

The number of faculty members offered probationary appointments increased only at Acadia, where 21 places were available in 1972-73; 26 in 1973-74, and 28 in the current academic year.

Other universities surveyed either showed fluctuations in the number of probationary appointments, or a definite drop. At Queen's University for instance, the number of total existing probationary appointments dropped from a 139 high in 1972-73 to 105 in 1973-74, falling further still, to 58, in 1974-75.

Four of the nine universities canvassed showed an upward trend in the number of seasonal, limited term or term appointments made. This was most evident at Winnipeg and the University of New Brunswick.

The money is scheduled for tuition fees, books and equipment, and additional funds will be made available to cover the cost of baby-sitters, day-care and transportation.

To qualify, applicants must be unemployed, receiving social assistance or come from a lower income family.

The Minister also announced that the province is to increase aid for full-time students under its Ontario Student Assistance Programme.

Among other things, the plan will enable students to borrow at low interest rates, up to \$1,400 each academic year to a maximum of \$4,000.

Under the programme, the first \$800 is a loan which requires no repayment until six months after graduation. Assistance beyond that

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Sean O'Connor: radical architect.

The department document reviewed both unified and binary options, coming down in favour of binary on the grounds that this would allow the technical sector to develop its own strength without the threat of being overshadowed by the more conventional academic traditions of the universities.

It was argued that this was more likely to produce a comprehensive system than one which developed under university domination.

This form of championing the technical sector, which implies direct criticism of the role of the universities, is what makes Mr O'Connor such a suspect figure in university circles, an apprehension which has been reduced on occasion to the remark that he is not a university man.

Dr O'Connor, who is and cannot therefore be expected to understand their problems or perceive their virtues.

Dr O'Connor is known to have been deeply involved in the department document on higher education reorganization (*THESE* March 7, 1975) which was emphatically rejected by the Cabinet in favour of a unified system at the level, which effectively brought the technical sector in under the wing of the universities.

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Canada

Fears for job security as tenure is cut

from Israel Chinnman

OTTAWA

An increasing number of Canadian universities are making fewer probationary appointments leading to tenure, preferring in some cases to offer full-time seasonal or limited-term appointments instead.

The possible outcome, according to a nine-university survey conducted by the Academic Freedom and Tenure Committee of the Canadian Association of University Teachers, may be direct tenure quotas and lack of job security on the part of professors whose contracts are repeatedly renewed.

Of the nine universities polled (Acadia, Alberta, Lethbridge, Queen's, St. Francis Xavier, Saskatchewan, Waterloo, Winnipeg and University of New Brunswick), most showed a slight increase in the number of total tenured faculty in the last three academic years.

None, however, experienced a dramatic upsurge, and the increase almost never climbed higher than five percentage points from any previous year in the last three years, usually levelling off at about 3 per cent.

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Light justice for students

The sentences handed down last week by the disciplinary committee at Lancaster University to 30 of its students have produced a mixed response at Lancaster itself and elsewhere.

While there is a general feeling that the apparent severity of the punishments meted out were justified in the circumstances, this approval is tempered by doubts that the university may be sowing the seeds of a further flowering of disruption and dissent.

It must first be said that the Lancaster students have brought their troubles on their own heads. The occupation which gave rise eventually to the investigative committee and the disciplinary committee was instigated on the most transparent of excuses. Students may have legitimate grievances in many areas, but the proper approach is to initiate a discussion rather than attempt to force a showdown.

The Lancaster senate showed its disapproval of these tactics by voting virtually unanimously for the disciplinary proceedings, and gave the disciplinary committee the power to take what action it thought fit, including expulsion, against students found guilty of offences.

What makes it so difficult to decide whether the university has taken the most sensible, even if morally absolutely correct, action is the variety of motives to be found within the student body leading to the simple-minded action involved in occupation and disruption.

Students, to misquote the education *Black Papers*, are not naturally bad, and they became involved in militancy for a number of reasons: some because they are genuinely seeking to improve the quality of student life and who may nevertheless have political convictions which lead them to extreme actions, some because they are bored and welcome a break from the pressure of work, some because they are irresponsible and stupid.

These categories have always been and can surely continue to be dealt

with by the traditional methods of internal university discipline procedures. For such students, an occupation is often little more than a rag which costs rather than makes money. Universities by their very nature are able to absorb and contain an enormous amount of internal dissent, and their autonomous status requires that they should be able to do so.

They are, however, peculiarly susceptible to the activities of a fifth column. It cannot be denied that those universities which are most troubled contain a small number of hoodlums who are motivated either by political or personal convictions and whose sole aim is damage and disruption. These people, and there are only a tiny number, have no place in the universities.

The problem is that an occupation and its consequences turn all those involved with the same brush and the idealistic and the stupid find themselves arraigned for the same crimes as the malevolent.

The Lancaster students who were punished got off comparatively lightly. Ordinary working youths who behaved in a similar manner would almost certainly have been dealt with much more severely in a criminal court. But such proceedings would have been held in public, unlike the Lancaster tribunal which was a private affair.

For a student expulsion is a serious matter, although not as damaging as a criminal record, and it was not possible independently to judge whom, if any of those found guilty, were among the malevolent and whom were merely misguided.

It is easy with the wisdom of hindsight to criticize the Lancaster procedures, but certainly disciplinary proceedings held in private make independent assessment difficult. And as academics are largely inexperienced in formal disciplinary matters, an independent chairman might have been a valuable asset on the disciplinary committee.

One misjudgment too many?

Supporters of Mr Terence Miller, director of the Polytechnic of North London, last week accused members of the court of governors of the "calculated use of a flimsy pretext" to recommend his suspension. In a letter to *The Times* they attacked them for a "grotesque over-reaction" to what was "a relatively trivial error of judgment".

The submission to the Department of Education and Science of his own recommendations on the level of student representation after having previously agreed a different level.

What they failed to mention was that this was by no means the first time Mr Miller had suffered an error of judgment. On two occasions previously emergency governors had been called to discuss his irregular conduct.

The first was in 1972 when, without consulting the court of governors and without offering an explanation until three months later, he suspended Mr Wycliffe Jenkins, the head of the business studies department.

The second was 18 months ago when he signed a formal agreement with two business studies courses and their staff to the awarding body, saying he did not think they should be approved.

Not do the supporters mention the fact that it was not only the governors who recommended his suspension. The Joint Polytechnic and Higher Education Advisory Committee, which was

almost unanimous motion condemning the director's action as "grossly improper".

The significance of this vote lies in the relatively conservative composition of the committee. It has no student or staff-elected governors and comprises leading members and officials of the ILEA, including the education officer, representatives of the directorate, including the director, and the chairman and deputy chairman of the court.

Finally, his defenders point out that the substance of his letter recommending that the student representation on the academic board be cut from 33 per cent to 12 per cent, when the Joint Advisory Committee had recommended 20 per cent, would probably have considerable support both inside and outside the polytechnic.

This is undoubtedly true. A level of 12 per cent would still only bring the polytechnic into line with the majority, the average being 11.5 per cent. Moreover, the students at North London have an appalling record of disruption and intolerance, unjustifiably labelling Mr Miller as a racist when in fact he had taken a relatively anti-government line as principal of the University College of Rhodesia.

But the substance of his letter to the DES is not the question at issue. This crisis of the matter is whether Mr Miller should have sent it at all. It is not the substance of the letter which is the question, but the fact that he sent it at all.

LETTERS TO THE EDITOR

University and poly salaries

From Mr Jonathan Bard and others
Sir,—It is most unfair of you to say that university teachers are considering strike action because polytechnic lecturers are paid more than they are (*THES*, April 25).

We, in the Medical Research Council, who are paid on university rates, are glad that the polytechnic teachers get a reasonable salary. We do not grudge a good standard of living to our technicians and technical officers, who, as they are on NHS pay scales, are now on similar or better scales than the MRC scientists. We are, in fact, furious because, in a time of rapid inflation, university teachers are a special group whose real salaries have not been maintained by the Government.

MRC scientists feel particularly hard done by, for not only is our salary tied to university rates, but we do not get such university fringe benefits as subventions. Moreover, our career prospects are more uncertain than any other equivalent group of scientists, for our tenure system is designed to throw out a proportion of the scientific staff.

In the recent round of tenure decisions, around one half of the applicants were rejected by distant committees on unclear criteria. In our own unit, at the Western General Hospital, several scientists whose work has never been criticised over five or six years have been refused tenure and have no idea why they were rejected. You can picture their prospects in the current job market. You might well think that this is a topic on which your newspaper should have views.

It does not help teachers and research workers in the present climate for you to debate the level of argument to a snide comment on *divine fire*.

Yours faithfully,
JONATHAN BARD, DAVID YOUNG, BRIAN COHEN, YVONNE BOYD, JACKIE ROBINSON, ANDREW CORRUTHERS, ELIZA BETH ARTHUR, TOM ELSDALE, MARGARET DUNCAN, PAUL PERRY, CHRISTINE GOSDEN, JOHN GOSDEN, ROBIN MCDERMOTT, MARSHALL PRESSER, JOHN CAMERON, MAUREEN O'RIORDAN, MICHAEL STEEL, PAULA SUZALIM, DAVID MASON, TOM FERGUSON.

MRC Unit,
Western General Hospital,
Edinburgh.

from Mr P. R. Bridger
Sir,—Deafened by the clatter of middle-class begging-bowls, but not yet blinded by the brilliance of men-

dant arguments, I continue in the opinion that university lecturing is a well-enough rewarded profession.

At the hour when most of us are scanning *The Times* or *The Guardian*, benignly watching our wives pack the children off to school, millions have already clocked in and are hunched over implacable machines. Not for them the thrill of intellectual challenge, the freedom to control their own timetable, the prospect of a dozen or more annual increments: for them the dirt, the danger, and the ever-greater fear of unemployment.

Lawyers, doctors and accountants are also spared the major discomforts of an industrialized life, and have always been, even better rewarded than university lecturers. However, it is precisely the habit of looking greedily towards those better off than ourselves that has led us into the lethal spiral of inflation.

I suggest that the time has come to examine more closely some standards that might be seen as absolute. The best things in life are not free—true; but they are very cheap.

In public libraries there are more books than I shall ever read, more recorded music than I shall ever have time to listen to, museums and galleries are of easy access, and conversation and companionship are still as free as the air. At an Association of University Teachers meeting recently a colleague informed me that I had been reading too much Plato—I replied that he had not been reading enough.

"Back to Socrates" is a slogan that may not inspire many twentieth-century teachers, but I find it easier to defend than "On with Oliver Twist".

My good friend and colleague Peter Madgwick writes to you (*THES*, April 25) that we cannot on our own, "escape the evaluative imperatives of a competitive and hierarchical society." I answer that it is up to us to defy imperatives, from whomsoever they may issue, and up to us to determine the rules of the competition. If we decide that the battle is about money, then we have already lost, but if we decide that the battle is about how to live a decent life and how to use our intellectual talents, then all our salaries come as pure 100 per cent bonus.

Yours faithfully,
P. R. BRIDGER,
Happy Island,
Pwllmelin Road,
Cardiff.

Staff-student ratios

from Mr R. S. McConnell
Sir,—The table showing that the student/staff ratios in polytechnics are more favourable than in universities, was surprising (*THES*, March 28).

Presumably the reason that so many of us in polytechnics seem to be so hard-worked is that universities have a much better proportion of clerical and administration officers—and typists—per lecturer.

A further explanation why so many of us seem to be so busy is that some polytechnics have departments with an extremely favourable staff/student ratio, because their courses are no longer attracting many students: the corollary being that other departments are unable to be allocated additional lecturers, in spite of the large increase in student numbers on their courses. For the reason that the education authorities are not permitting polytechnics to have additional staff, and, in many cases, are requiring an overall reduction in the number of lecturers, hoping that the polytechnics will themselves be able to rationalize the great disparity in student/staff ratios between departments.

Such a policy is, of course, very difficult to implement. Thus it is that despite the more favourable ratios in polytechnics, many departments in many polytechnics are still disadvantaged.

Political studies

from Mr Russell Price
Sir,—Ivor Crewe's reflections on the Political Studies Association conference (*THES*, April 11) were both interesting and provocative.

I suspect that the title of the association and its journal, *Political Studies*, was chosen over 20 years ago precisely because it was neutral, and being uncontroversial would be generally approved of by professional students of politics; by those who consider that the "scientific" study of politics is possible or has been achieved as well as by those who, far from thinking that politics is "Britain's most backward social science" (as Mr Crewe believes), would not classify it as a social "science" at all.

"To describe oneself as a 'student of politics' or as engaged in 'political studies' is certainly not 'simply false to label (oneself) at all'." It is very strange that Mr Crewe should think that the use of "studies" implies "a nonchalant attitude to research." I wonder what he takes to be implied by *French Studies*, *Italian Studies*, *Studies in the Renaissance*, *Victorian Studies*, *Modern Asian Studies*, and similar titles of academic journals.

Language teaching

from Professor D. E. Ager
Sir,—Professor Charlton (*THES*, April 25) is very keen to lead out at the technological universities and polytechnics language courses and their darling attempts to drag language-learning in higher education out of the Middle Ages.

It is a pity he sweeps all his other prejudices into the same attack and blames us for almost everything, including the failure of the primary French experiment to provide him with linguistically expert students who would enable him not to both teaching the French language at all.

When will he and his friends, whose ferocity is undoubtedly increased by the shrinking number of sixth formers who are prepared to accept aristocratic ivory-towerism, realize that the social sciences require as much academic intellectual capacity as any study of Racine's *tendresse*?

And that what is for him "background" is for us "foreground" we study languages in their social political context as the focus, not an incidental of our courses? And that we do not train interpreters? And that employers do not prefer "arts graduates, properly trained in the intellectual mode"—the *Yon* survey showed a higher proportion of "our" graduates going into industry and commerce than of "traditional" graduates?

Really, to read Professor Charlton is a delight but to make any sense of his arguments is much less so. One might inquire of him for starters why he is so opposed to the idea that undergraduate education should be regarded as a preparation for life in the world outside education; why he so steadfastly refuses to believe that his graduates actually make use of the results of their three or four years' hard work in French?

To talk tendentiously of "humanities education surviving the vocational courses centred on interpreting techniques for largely non-existent vocations" is as much rubbish as to talk of the graduates of our courses going reluctantly into teaching (the *Yon* survey again). It is a far greater proportion of "traditional" graduates doing so.

And as for the decline of foreign languages being caused by computer-hensies—it is all part of the *Black Paper* belief that "real education" should only be offered to the sons of the aristocracy, and that everyone else can "disappear into apprenticeships".

It is a great pity Professor Charlton attempts to drive this artificial wedge between two types of course as he knows full well that universities in this country offer a range of courses, spanning the whole gamut from area studies, via linguistics and the socio-literary, to the wayward medievalists.

This range is one of the great advantages of the British educational system; if the educational authorities want "all to go on-step along with the same curriculum because, in their view, studies of the sixteenth century are more intellectually valid than studies of the twentieth century, then they will have to show rather better than they have been doing the advantage to students and to society of such an imposed, directed training.

Higher education must accept responsibility towards both individuals and society as a whole; if the technological universities feel that, as a part of a free society, they wish to ensure that they are not creating unemployable dilettantes, then this I feel, is something to be proud of.

Take heart, Professor Charlton: the staff in the technological universities, nearly all of whom have been trained in traditional universities, are fully aware of the defects and advantages of both approaches to language learning. It is, after all, because we know the defects of one that we have devised the other. To suggest, however, as you do, that our sole aim is to train students for non-existent jobs is at best wrong-headed, the *Yon* survey—and at worst, one more of the handful of academic mind which have been set around in the hope that some will stick.

Yours faithfully,
D. E. AGER,
Professor in Modern Languages,
Aston University.

Levels of work

University teaching is the teaching that university teachers do

Further education teaching is the teaching that further education teachers do

If polytechnic teachers are to do what university teachers do, they must have university conditions for doing it

Ronald Tress discusses salaries

The Houghton Committee, rightly therefore in my view, opted for a common grading structure and, given level of work as the established measure, chose the form already most widely in operation: the grading, not of institutions or individuals, but of permissible establishments: "posts making up the establishment of the institution are distributed proportionately among the grades according to the levels of work undertaken" (para 160). The method gives due weight to the overall balance of work in each institution without arbitrarily breaking up the spectrum. At the same time it leaves institutions and their authorities with a degree of freedom in the allotting of available posts to particular teachers which they would not have if the teachers themselves were graded. They are free to appoint an outstanding young teacher to Lecturer II post if they need him. Equally, they can reward by promotion to Lecturer II the well-established teacher who is prepared to give his time to the less bright students, the professional examinations or the youngsters on day release.

The demarcations required for a level of work system to be operable present two sorts of problem. There is first—taking O-level or grade, ONC and degree as the benchmark—how to relate all the other available qualifications to those three. This is the problem of "equivalences". Secondly, there is what standing to give to work which parallels these qualifications but which some of the work force reach an "equivalent" conclusion not go far enough to stretch across one equivalent without reaching as far as the next. This I shall call the problem of the module. I shall not take up space on the first. Working out "equivalences" is a small industry in itself, but the skills are well established. About the problem of the module, on the other hand, there is a lot to be said.

The Houghton Committee marked out the levels of work for a common grading scheme to cover all non-university further and higher education, both north and south of the Border, and specified five categories: I Courses above first degree level and research training; II Study above ONC or equivalent standard leading directly to a university degree or equivalent qualification; III Study of equivalent standard to that in category II, but not necessarily leading to the qualifications mentioned in that category; IV Study or courses above O-level GCE or O-grade SCE or comparable level leading directly to the ONC or courses or parts of courses of a comparable standard; V Courses other than those listed.

Category I is an innovation, offering the prospect of an increased proportion of higher grade posts in the polytechnics, the Scottish central institutions and the colleges of education. I have already pointed out how the reformulation of the final category, now Category V, takes it out of the rank ordering of the rest. The problem of the module centres upon differentiating between Categories II and III. The latter is listed as being "of equivalent standard" to the former. The difference between them is that the former does, and the latter does not necessarily, lead directly to a degree or its equivalent. What is meant by "leading directly to a degree"?

The Houghton Report shows deep misgivings on this question: "the development of modular degree structures, the possibilities of an enriched Certificate of Education course being extended to a BEd degree, the introduction now of the Diploma in Higher Education which is simultaneously a terminal qualification and a stage leading to a degree, make the rigid reference to degree work increasingly difficult to sustain..." (para 165). The pattern of the three-year integrated single-subject programme was never the sole pattern of study leading to an honours degree, even among the older English universities (remember the Cambridge tripos). Though strongly upheld in many quarters and still dominating much of university practice, it is even less typical following the developments quoted above. Although we are still a long way from "the cafeteria of free choice" to use Geoffrey Squires's telling description of unit-credit systems (*THES*, March 28, 1975), the module and the achievement of a degree award

through the accumulation of modules are inescapably with us. We can wrestle with the consequences, but not against the happening.

So it was that the Houghton Committee, in its Categories II and III, kept the distinction between work which does, and work which does not, lead directly to a degree or degree-equivalent but deprived it of any effect on establishments. In their revised rules for determining the proportions of posts in the lecturer grades, the status of departments, and so on. Categories II and III are invariably bracketed together. All the more surprising, therefore, is the occasion for which they are then prised apart. "For the purposes of pay determination", says the report, "a distinction must be drawn if legitimate differentials among teachers are to be sustained" (para 166). So there are "work bars" in the salary scales. For England and Wales, the top two increments on the senior lecturer's scale are reserved for those responsible for "a significant amount" (at least 50 per cent of work time) of work in Categories I and/or II. Category III work does not qualify. Why?

Above, I cut short a quotation from the report before its concluding phrase: "the development of modular structures, and so on made rigid reference to degree work difficult to sustain" (as a proxy for the characteristics to be expected of the teacher). This is the core of the matter. All the categorizing references to "courses" and "study" are not really about the work of the student at all. They are "an attempt to make the academic attainments of the student an assessment of the qualities and characteristics of the teacher". Now, to the university teacher, such a proxy representation is wholly artificial, and unacceptable. To pick up the example in my first paragraph, the economics lecturer in a university is doing university teaching undifferentiated, whatever the source, experience or ulms of the different groups of students who attend his classes. In fe, an introductory course in economics given by the same person with the same syllabus and same textbooks would rate Category V if given to an adult education class, IV if given to candidates for examinations in professional accountancy or banking, III if given to students in teacher training, II if given to students enrolled for a CNA degree, and I if included in a course in management studies for graduate engineers. Why cannot we just say, further education teaching is the teaching that further education teachers do?

"Legitimate differentials", is the answer of the Houghton Report. The phrase follows an argument seeking to relate the categorized "level of work" leading to a degree and university teaching: "Teaching for first and higher degrees, supervising and conducting research are the acknowledged characteristics of the university teacher. It has been recognized that teaching for degrees elsewhere requires some or all of these same characteristics (para 165). What also has to be recognized is that these characteristics are a scarce commodity. Given the widespread competition for their possessors from many other professions besides teaching, there are not nearly enough to fill all the posts in all the institutions currently offering degree level courses and all courses within that range. There has to be discrimination, either between institutions or between people in institutions. Discrimination between institutions is contrary to public policy. I gave above the objections to separating off the polytechnics from the rest of further and higher education, given the present patterns of work, and there would be the strongest resistance from the authorities to simplifying the pattern. The White Paper on polytechnics and other colleges (*Cmd 6006*) specified a dual teaching role for the polytechnics: courses of degree standard and higher education courses below degree standard. So there is left discrimination between people in institutions. Make sure that degree work gets a share of the brightest people. Offer staff needed for work in Categories I and II a higher salary maximum than the rest, reflecting the greater external competition for their services.

University teachers are prone to observe that there are teaching in polytechnics former students of theirs now reckoned broadly comparable" to themselves—and currently better paid—who would not have been selected for posts in their own departments. The universities should not make too much of this argument. It is in their own interests to maintain that degree teaching requires "the acknowledged characteristics of the university teacher" and cannot be done properly for less. Degree teaching outside the universities therefore must pay the rate and provide the working conditions for the job. If it is true that some degree-level teachers are certainly not all—are not up to university standard, university teachers themselves can afford only one response: mark the experience down to past under-performance and see that there is no undercutting in the future. If polytechnic teachers are to do what university teachers do, they must have university conditions for doing it.

Yet the criticism is not to be ignored. The justification for the height of the salary scales, inclusive of the differential beyond the work bar, and the broad comparability these were intended to establish with universities, was to enable the polytechnics to hold on to those present staff and to attract newcomers of whom the criticism could not be made. The agreement of management and unions in the Durham Further Education Committee to override the work-bar on behalf of the senior lecturers already in post, contrary to Houghton recommendation, is a move in the reverse direction: a wasteful gesture to the past and a poor advertisement for the future.

Dr Tress, master of Birkbeck College, London, was member of the Houghton Committee

BOOKS

Inside the shell

Despite the criticisms I have had above, this book is certainly very worthwhile and, as the note on the inside of the dust cover suggests, "should bridge the gap between the elementary textbooks that are available on developmental biology and the research journals and reviews." I am sure that one or more volumes dealing with some of the cells and tissues not included would be most welcome in the future.

SEMINAR PRESS
London New York
San Francisco
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 Brace Jovanovich
 Publishers
24-28 Oval Road,
London, N.W.1, England
111 Fifth Avenue,
New York, NY 10003, USA

Ancien régime

Patrick Renshaw

ULSTER
THE NEW UNIVERSITY

Further particulars may be obtained from the Registrar of the New University at 1110 Coleman. Particulars for the Academic Year 1976-77 are available on application to the Registrar and admissions officers. References should be made to the following:

ULSTER
THE NEW UNIVERSITY
SCHOOL OF HUMANITIES
Temporary LEICESTER
WEST EUROPEAN SOCIETY

Applications are invited
for a temporary LEICESTER
WEST EUROPEAN SOCIETY
for a period of the
commencing 1st Sept
1976.

Candidates must have
a degree in French in
politics and society, or
able to work in French
at a high level.

Appointment will be made at the first meeting of the Faculty Lecturer's Association plus three days pay (with F.S.M.T., U.S.M.S.).

Further particulars may be obtained from the Dean, The New University of Colorado, Northern Branch, following reference to the above. Applications, to be made to the chairman, whose names and addresses of referees, should be submitted later than 23rd May.

ZAMBIA
THE UNIVERSITY

Applications are invited from holders of a BACHELOR'S DEGREE in the field of Education, or in the field of Mathematics, or in the field of Education and Mathematics, for admission to the first year of the Bachelor of Education (Mathematics) programme. Applicants should have a good first year in Mathematics as a subject, training in English, and a good degree or as a postgraduate certificate, in education.

[illegible]

mentation is unlikely to an unmarried applicant level. Supplemental rates are under new rates will apply from 1978. Family allowances and medical and regular leave.

ZAMBIA
THE UNIVERSITY

qualification in French with long experience in teaching and including publishing a large of modern language teaching material. This is well known and current, open to the public, by the degree Education and at School of Education a sound research graduate programme in field of language in.

supplying to \$1.15
 interesting for mem-
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 (starting) for about
 (normally) free of
 provide children
 allowances and in-
 vestments. Suppliers
 are currently un-
 der new rules. In
 April 1978, there
 various allowances
 migration and
 schemes, regular
 leave.
 detailed applica-
 tions), including
 wine and insurance
 should be applied by
 later than April 1,
 The Registrar,
 (Albion, N.Y.)

Luzaka, Zambia.
spaldont in time
should also send
later University of
Zimbabwe Court
don with GBT.
Military was in

Universities continued

WARWICK
The University of Warwick is seeking applications for a Lecturer in the Department of Sociology. The post is for a full-time position and the successful candidate will be expected to teach and supervise research. The salary scale is £5,000-£5,613 (Work bar) plus £229 threshold (under review). Applications should be sent to the Director of Staffing, Warwick University, Coventry CV4 7AL.

Fellowships and Studentships

SOUTHAMPTON
The University of Southampton is seeking applications for a Lecturer in the Department of Sociology. The post is for a full-time position and the successful candidate will be expected to teach and supervise research. The salary scale is £5,000-£5,613 (Work bar) plus £229 threshold (under review). Applications should be sent to the Director of Staffing, Southampton University, Southampton SO9 4NH.

Courses

post experience diploma in educational technology

This 16-week course, which commences in September 1978, is designed to meet the needs of teachers, lecturers, and training personnel to increase their knowledge of the methods and procedures adopted, and the material and equipment used.

September-December (16 weeks) full time in college studying Educational Design, Instructional Media, Media Production and Computing.

January-May in professional practice in the student's own establishment.

June 16 weeks full time in college studying Management of Media Resources and Services or Design and Production of a mixed media learning package.

July-December in professional practice, implementing and evaluating the prepared package. Project report submitted.

Full details including specific objectives for each component of the course together with application forms are available from The Director, Audio Visual & Educational Media, Dundee College of Technology, 81 Street, Dundee DD1 1HG.

dundee college of technology

Polytechnics

ABERDEEN
ROBERT GORDON'S
INSTITUTE OF
TECHNOLOGY

Scott Sutherland School of Architecture

LECTURER

ARCHITECTURE

With relevant experience in practice, teaching or research to undertake work in a lively and progressive School. Specialisation in one or more of the following fields desirable: Architectural Design, Building Technology, Urban Design, Environmental Design, Professional Practice.

Salary: in range £2,670-£4,206 (bar) plus threshold (under review) plus Threshold Agreement Payments.

Assistance with removal expenses. Details from: Director, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen AB9 8PP.

Polytechnics

Ulster College

Northern Ireland
Polytechnic

Increase in student numbers and further developments in Degree, Diploma and Professional Courses create the following vacancies:

FACULTY OF BUSINESS
ADMINISTRATIONPrincipal Lecturer—Business
Planning/Policy

To co-ordinate and develop proposed degrees in Accounting.

Principal Lecturer—Financial
Accounting/Financial Analysis

To teach on final level Professional Accounting courses and act as organiser and occasional lecturer to seminars and conferences on accountancy and taxation topics to Northern Ireland accountants and industrialists in the major growth area of Accountancy and Business Education. Appropriate Degree and/or Professional Accountancy qualification with teaching and research or Business experience desirable.

FACULTY OF SOCIAL AND
HEALTH SCIENCESLecturer II/Senior Lecturer—
Psychology of Language

To teach and develop elements of a proposed BSc Speech Therapy and other courses requiring Psychology of Language.

FACULTY OF TECHNOLOGY

Lecturer II/Senior Lecturer—
Civil Engineering Construction
& Materials

Applicants should have had experience on civil engineering contracts either with contractors or consulting engineers and a sound knowledge of the methods and procedures adopted, and the material and equipment used.

Lecturer II/Senior Lecturer—
Fluid Mechanics

Graduate or Chartered Engineer with primary interest in hydrodynamics, model analysis and design of hydraulic structures and systems. Experience in teaching at degree level preferred.

The Establishment Officer, Ulster College,
The Northern Ireland Polytechnic,
Newtownabbey, Co. Antrim, BT 37 0QB

GLASGOW
COLLEGE OF
TECHNOLOGY

Applications are invited from suitably qualified persons for the following posts:

SENIOR LECTURERS

BIOLOGY • BUSINESS ECONOMICS
INSURANCE • MECHANICAL ENGINEERING

SENIOR LECTURER
OR LECTURER

ELECTRICAL OR ELECTRONIC ENGINEERING

LECTURERS

BIOCHEMISTRY (CLINICAL CHEMISTRY) BIOLOGY
OFFICE AND SECRETARIAL STUDIES PUBLIC ADMINISTRATION LAW ORGANIC CHEMISTRY INSURANCE BANKING ACCOUNTING MARKETING COMMUNICATION STUDIES PSYCHOLOGY NURSING STUDIES BUSINESS POLICY LANGUAGES—German and supporting language SOCIAL ADMINISTRATION (Sociology) MANPOWER STUDIES

SALARY
SCALES

Senior Lecturer: £5,001-£5,613 (bar) £2,670-£4,206 (bar) plus threshold payments (under review)
Lecturer: £2,670-£4,206 (bar) £2,670-£4,206 (bar) plus threshold payments (under review)

Application forms and further particulars may be obtained from the Establishment Officer, Glasgow College of Technology, Glasgow G4 0BA, to whom they should be returned by 19th May 1978.

GLASGOW
COLLEGE OF
TECHNOLOGY

SENIOR LECTURER

Applications are invited from graduates with a background and qualifications in management, business studies, economics or engineering to undertake research leadership responsibilities in a maritime studies degree course.

This course is interdisciplinary and a person is sought with a broad knowledge capable of generating a team concerned mainly with business studies, management and technology and aimed generally towards the management of ship operation and sea transport.

Salary scale: £5,001-£5,613 (bar) £2,670-£4,206 (bar) plus threshold payments (under review).

Application forms and further details may be obtained from the Establishment Officer, Glasgow College of Technology, North Hanover Place, Glasgow G4 0BA, to whom completed forms should be returned within 10 days of the appearance of this advertisement.

THE POLYTECHNIC HUDDERSFIELD

Department of Management Studies
SENIOR LECTURER/LECTURER II IN ORGANISATION
DEVELOPMENT (2 posts)

Applicants should be well qualified and with experience in the areas of Organisation Development/Teamwork Development/Group Dynamics. As well as lecturing on the Department's courses, those appointed would be involved in the promotion, development and administration of short courses in Organisation Development work within industry, commerce, and particularly the public services.

Department of Computer Studies and Mathematics
LECTURER II IN STATISTICS

Applicants should be good honours graduates and be able to teach to degree and diploma level, mainly to Faculty of Business students.

Salary: £2,670-£4,206 (bar) £2,670-£4,206 (bar) plus threshold payments (under review). Further details and application forms, which should be returned within 14 days, from the Establishment Officer, The Polytechnic, Huddersfield, HD1 1TA.

Polytechnics continued

Ulster College

Northern Ireland
Polytechnic

Applications are invited for the post of

DEAN

of the
FACULTY OF THE ARTS

SALARY £8400

+£229 Threshold (under review)

The Dean will be responsible for the academic leadership of a faculty which includes five Art and Design Schools, and three Humanities Schools. Its work embraces four C.N.A.A. degree courses in Art and Design and developing post-graduate studies, a Design and Developing Humanities degree (including C.N.A.A. Combined Humanities degree (including Languages)), the general studies work throughout the polytechnic and a growing programme in Music and Drama.

Applicants should be well-qualified experienced graduates in an appropriate discipline who are able to make a significant contribution in teaching, research and course development.

NOTE: The Polytechnic is creating a limited number of PROFESSORSHIPS and the successful candidate will be eligible for such an appointment on a personal basis.

The Polytechnic occupies a semi-rural position on a 114 acre campus overlooking the sea at Newtownabbey, a pleasant and quiet residential area. There is a scheme of assistance with removal expenses.

Further particulars and application forms which must be returned by May 19 may be obtained by telephoning Whiteabbey 66131 ext. 2243 or by writing to:—

The Establishment Officer, Ulster College,
The Northern Ireland Polytechnic,
Newtownabbey, Co. Antrim, BT 37 0QB

The Polytechnic
of North LondonFaculty of Economic
and Administrative Studies

The Faculty comprises three departments: Accounting and Administrative Studies; Business Studies; and Management Studies.

Head of Department of
Management Studies—Grade IV

Applications are invited for the Headship of the Department of Management Studies which has become vacant through promotion. The post requires substantial involvement in new and existing courses within a developing faculty; liaison with outside organisations and an active role in the encouragement of research and consultancy.

Courses in the Department range from long-term educational courses to short-term training courses offered on a full-time, part-time and evening basis. Applicants must have relevant professional or academic qualifications. They must also have held responsible positions in teaching or industrial training, and have had substantial managerial experience.

Responsibilities will include the development and marketing of new post-graduate and post-experience courses for industry, commerce and the public services. Salary scale: £5,712-£6,480 per annum and London Allowance of £351 and Threshold payments.

Application forms and further details may be obtained from the Establishment Officer, The Polytechnic of North London, Prince of Wales Road, NW5 3LB (01-485 0101, extn. 28).

Applications should be returned by 19th May, 1978.

SUNDERLAND
POLYTECHNICRe-advertisement
SUNDERLAND POLYTECHNIC
FACULTY OF ART & DESIGNDean of the Faculty
of Art & Design

Salary: £8,500 (under review), plus threshold payments. The Faculty of Art and Design is one of five Faculties within the Polytechnic, the other four being Education, Engineering, Humanities and Science.

Applicants should be suitably qualified and with a wide experience in Art and Design Education to Degree and Post-Degree level.

An application form, together with further particulars, may be obtained from the Personnel Officer, Sunderland Polytechnic, Chester Road, Sunderland, Tyne and Wear SR1 3SD, and should be returned as soon as possible.

Ulster College Northern Ireland
Polytechnic

The Polytechnic is creating a limited number of

PROFESSORSHIPS

In which academic leadership, including teaching, course development and research will be emphasized. Successful applicants for the posts listed below will be eligible.

The posts, which are as

DIRECTOR OF STUDIES

arise from the recent promotion of existing holders to Dean of Faculty and the development of this new institution to meet its continued growth.

Salary Scale £6,270-£7,559
plus £229 Threshold (under review)

Appointments may be made at any point in the scale. Applicants should be capable of making a significant contribution to the academic work of the polytechnic in teaching, research and course development. They should have high qualifications and a special interest in one or other of the main activities of the School.

FACULTY OF BUSINESS

ADMINISTRATION

SCHOOL OF BUSINESS STUDIES

The work includes C.N.A.A. sandwich and part-time degrees and Higher National Diploma and Certificate courses, and contributions to existing and proposed degree courses in other schools. A wide range of research projects have been set up, and future planning also includes a Master's Degree in Business Administration.

FACULTY OF SOCIAL AND
HEALTH SCIENCESSCHOOL OF BEHAVIOURAL
SCIENCES

The School embraces divisions of Psychology, Speech Therapy and Vocational Guidance. It makes a major contribution to the Faculty's full-time C.N.A.A. degrees in Social Science, Social Work and Social Administration, is developing a new Psychology option on a sandwich basis, and a new degree in Speech Therapy, and offers a range of diploma courses in various aspects of vocational guidance, as well as contributing to many other courses throughout the polytechnic.

SCHOOL OF SOCIAL STUDIES

The School has divisions of Sociology, Social Work, Social Administration and Youth and Community Work. It embraces pure and applied studies in a wide range of degree and diploma, full-time and part-time courses within the School and contributes widely to other polytechnic courses.

FACULTY OF TECHNOLOGY

SCHOOL OF MECHANICAL &
INDUSTRIAL ENGINEERING

The School provides courses at degree, diploma and certificate level, including a new C.N.A.A. sandwich degree in Engineering (in association with another School), and new diplomas in Mechanical and Production Engineering. Part-time degrees, the development of T.E.C. Higher Diploma courses and post-graduate courses are planned. There is already a good tradition of research.

SCHOOL OF CIVIL
ENGINEERING

Expansion has led to the establishing of this new School separately from the School of Building. A proposed new C.N.A.A. sandwich degree in Civil Engineering is to start in September, and there is a range of diploma and certificate courses with contributions to other Schools. There is a growing involvement in consultancy and research within the School.

The Polytechnic occupies a semi-rural position on a 114 acre campus overlooking the sea at Newtownabbey, a pleasant and quiet residential area. There is a scheme of assistance with removal expenses.

Further particulars and application forms which must be returned by May 19 may be obtained by telephoning Whiteabbey 66131 ext. 2243 or by writing to:—

The Establishment Officer, Ulster College,
The Northern Ireland Polytechnic,
Newtownabbey, Co. Antrim, BT 37 0QB

The Hatfield
PolytechnicPrincipal
Lecturer in
SOCIAL
WORK

The successful candidate will be Head of the Social Work Academic Group of five lecturers and as such will be expected to play a leading part in the further development of social work studies in the Polytechnic including the mounting of a revised scheme for the Applied Social Studies degree in September 1978.

Applicants are invited to visit the Polytechnic. Salary Scale: £5,001-£5,613 plus £229 threshold (under review) plus £229 Threshold (under review) plus £229 Threshold (under review).

Applicants should be capable of making a significant contribution to the academic work of the polytechnic in teaching, research and course development. They should have high qualifications and a special interest in one or other of the main activities of the School.

Appointments may be made at any point in the scale. Applicants should be capable of making a significant contribution to the academic work of the polytechnic in teaching, research and course development. They should have high qualifications and a special interest in one or other of the main activities of the School.

Applicants should be well-qualified experienced graduates in an appropriate discipline who are able to make a significant contribution in teaching, research and course development.

NOTE: The Polytechnic is creating a limited number of PROFESSORSHIPS and the successful candidate will be eligible for such an appointment on a personal basis.

The Polytechnic occupies a semi-rural position on a 114 acre campus overlooking the sea at Newtownabbey, a pleasant and quiet residential area. There is a scheme of assistance with removal expenses.

Further particulars and application forms which must be returned by May 19 may be obtained by telephoning Whiteabbey 66131 ext. 2243 or by writing to:—

The Establishment Officer, Ulster College,
The Northern Ireland Polytechnic,
Newtownabbey, Co. Antrim, BT 37 0QB

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THAMES POLYTECHNIC
SCHOOL OF ARCHITECTUREHISTORIAN:
LANDSCAPE AND DESIGN

The School of Architecture, situated at Harmondsworth, is the London centre for Landscape Architecture education. Full and part-time courses lead to Polytechnic Diploma and professional membership of the Institute of Landscape Architects. The planning of a degree course has begun.

The School seeks a Historian, preferably with a research degree and teaching experience, to plan and teach courses in landscape and design history, including the history of ideas, to landscape and architecture students, and to be prepared to supervise research students leading to higher degrees.

The appointment will be made with effect from 1 September 1978, at Senior Lecturer Grade. Salary Scale: £5,001-£5,613 plus £229 threshold (under review) plus £229 Threshold (under review).

Applicants should be capable of making a significant contribution to the academic work of the polytechnic in teaching, research and course development. They should have high qualifications and a special interest in one or other of the main activities of the School.

Appointments may be made at any point in the scale. Applicants should be capable of making a significant contribution to the academic work of the polytechnic in teaching, research and course development. They should have high qualifications and a special interest in one or other of the main activities of the School.

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Polytechnics continued

OXFORD

Applications are invited for the post of Lecturer in Design in the Department of Design, Oxford Polytechnic, Oxford, OX1 1BB. Salary: £12,000-£15,000 p.a.

PLYMOUTH

Applications are invited for the post of Lecturer in Design in the Department of Design, Plymouth Polytechnic, Plymouth, PL4 8AA. Salary: £12,000-£15,000 p.a.

SHREFFIELD

Applications are invited for the post of Lecturer in Design in the Department of Design, Sheffield Hallam University, Sheffield, S1 1WB. Salary: £12,000-£15,000 p.a.

SUNDERLAND

Applications are invited for the post of Lecturer in Design in the Department of Design, Sunderland Polytechnic, Sunderland, SR1 1SD. Salary: £12,000-£15,000 p.a.

THAMES

Applications are invited for the post of Lecturer in Design in the Department of Design, Thames Valley University, Uxbridge, UB8 3PH. Salary: £12,000-£15,000 p.a.

WIRRAL

Applications are invited for the post of Lecturer in Design in the Department of Design, Wirral Metropolitan College, Wirral, CH61 1JH. Salary: £12,000-£15,000 p.a.

WYTHEN

Applications are invited for the post of Lecturer in Design in the Department of Design, Wythenshawe College, Wythenshawe, M22 1LH. Salary: £12,000-£15,000 p.a.

YORK

Applications are invited for the post of Lecturer in Design in the Department of Design, York City College, York, YO1 1PE. Salary: £12,000-£15,000 p.a.

YORKSHIRE

Applications are invited for the post of Lecturer in Design in the Department of Design, Yorkshire College, Leeds, LS1 1RH. Salary: £12,000-£15,000 p.a.

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SHREFFIELD

THE POLYTECHNIC

DEPARTMENT OF DESIGN

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CARDIFF COLLEGE OF ART

Department of Three Dimensional Design

Senior Lecturer—Industrial Design

Specialist responsibility for the teaching of Industrial Design

Applicants should be academically qualified and possess considerable industrial experience in a senior capacity.

Although teaching experience is not essential there must be a strong interest in design education.

Salary: £4,200-£5,412 plus Threshold.

Lecturer Grade II—Workshop Practice

Specialist responsibility for design development in three dimensional media.

Applicants should have considerable industrial model making experience covering all types of model making processes and materials.

Salary: £2,670-£4,476 plus Threshold.

Closing date for applications for both posts: Friday, 14th May, 1978.

Further details and application forms from: The Registrar (Ref. THES), Cardiff College of Art, Howard Gardens, Cardiff, CF2 1SP. (0222-22202.)

Inner London Education Authority

Central School of Art & Design

Fine Art Department

Practising Artists of repute who have experience of under-graduate teaching are invited to apply for the following positions:—

Lecturer II—Painting School

To act as First year Master.

Lecturer II—Sculpture School

To work as Assistant to the Section Head.

Salary £2,670-£4,476 plus Threshold payments (£225.60p) and London Allowance (£351).

Application form and further particulars from Senior Administrative Officer (FA/1.2), Central School of Art & Design, Southamption Row, London WC1B 4AP (01-405 1825).

Humberside County Council

Regional College of Art

COMPLEMENTARY STUDIES INCLUDING THE HISTORY OF ART AND DESIGN

Temporary Lectureship in the History of Art and Design

Applications are invited for a temporary post as Lecturer II in the History of Art and Design for the academic year 1977-78. The successful applicant will replace a permanent member of staff on sabbatical leave.

Good academic qualifications and teaching experience are essential for this post, which will involve a substantial contribution to the C.A.A. tutorial programme together with two courses or seminars in the successful candidates' special field of interest.

Salary: Lecturer II Scale £2,670-£4,476 plus threshold payments.

Further details and application form from the Registrar, Regional College of Art, Wilberforce Drive, Hull, N. Humberside.

Colleges of Further Education

BOLTON INSTITUTE OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

Applications are invited for

(a) LECTURER GRADE II IN HYDRAULICS/HYDROLOGY

(b) LECTURER GRADE II IN BUILDING TECHNOLOGY

Candidates for post (a) must hold a good Honours degree and have some years relevant practical experience or have undertaken appropriate postgraduate studies. For post (b) a degree would be an advantage but professional qualification is essential.

The Department currently offers a range of full-time/sandwich courses including B.Sc.(Hons) and B.Sc. in Civil Engineering and H.N.D's in Civil Engineering and Building.

Appointments will be made within the Lecturer II scale (£2,670-£4,476 plus £225 threshold payment). Subject to an individual efficiency bar, successful candidates will progress to the Senior Lecturer Scale (£4,200-£5,010 per year).

Application forms and further details are obtainable from the Chief Administrative Officer, Bolton Institute of Technology, Deane Road, Bolton, Lancs., BL3 5AS, to whom completed applications should be returned by 13th May.

LEICESTERSHIRE

COLLEGE OF FURTHER EDUCATION

DEPARTMENT OF PHYSICAL EDUCATION

Applications are invited for the post of Lecturer in Physical Education. The successful candidate will be responsible for the teaching of Physical Education to students in the College. The post is full-time and involves a substantial contribution to the College's tutorial programme.

Salary: Lecturer II Scale £2,670-£4,476 plus threshold payments.

Further details and application form from the Registrar, Leicestershire College